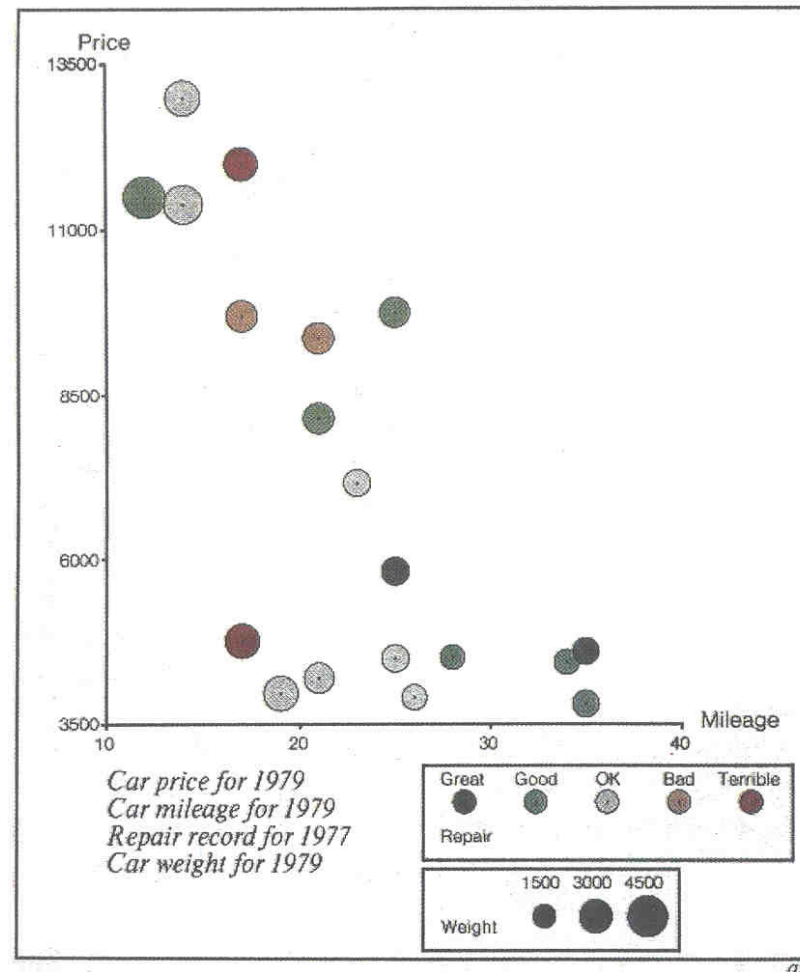
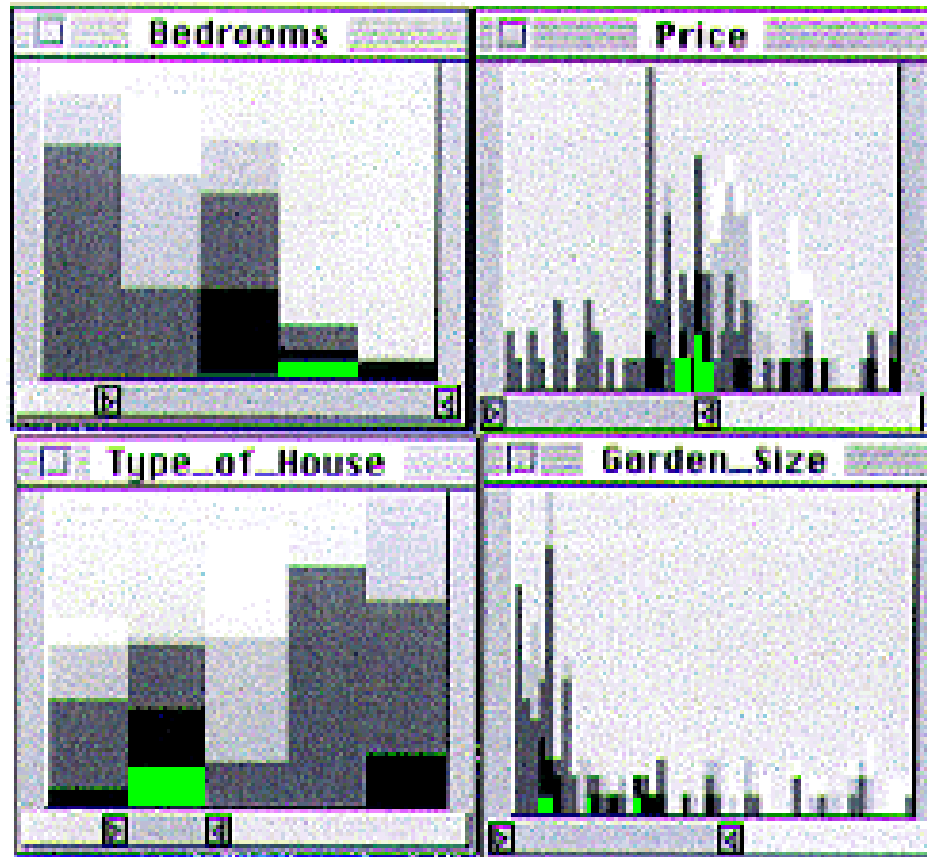


# Information Visualization Survey

# APT: A Presentation Tool

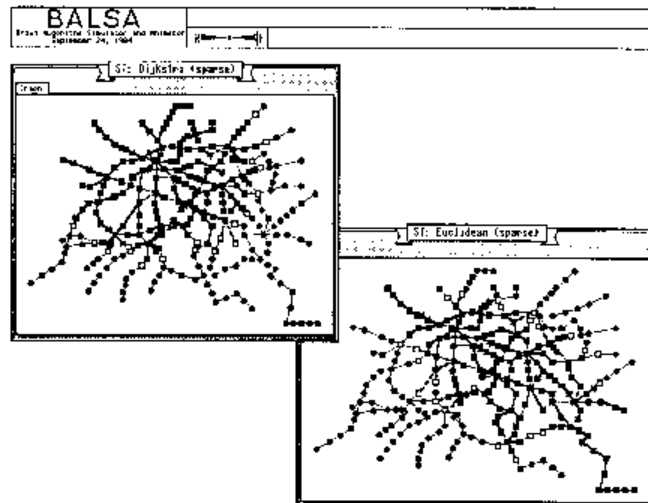
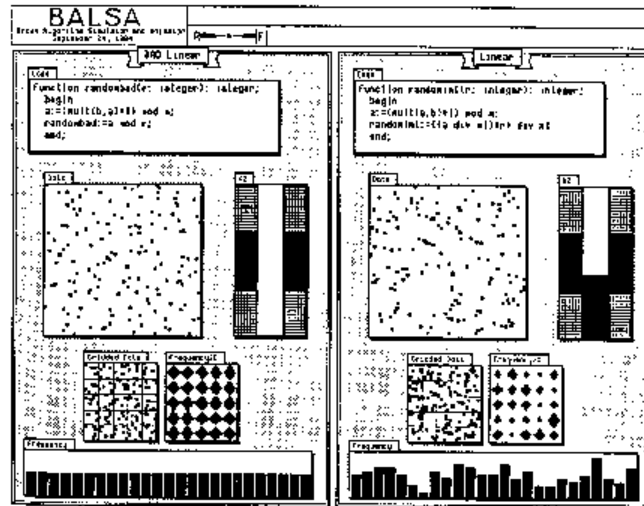


# attribute explorer

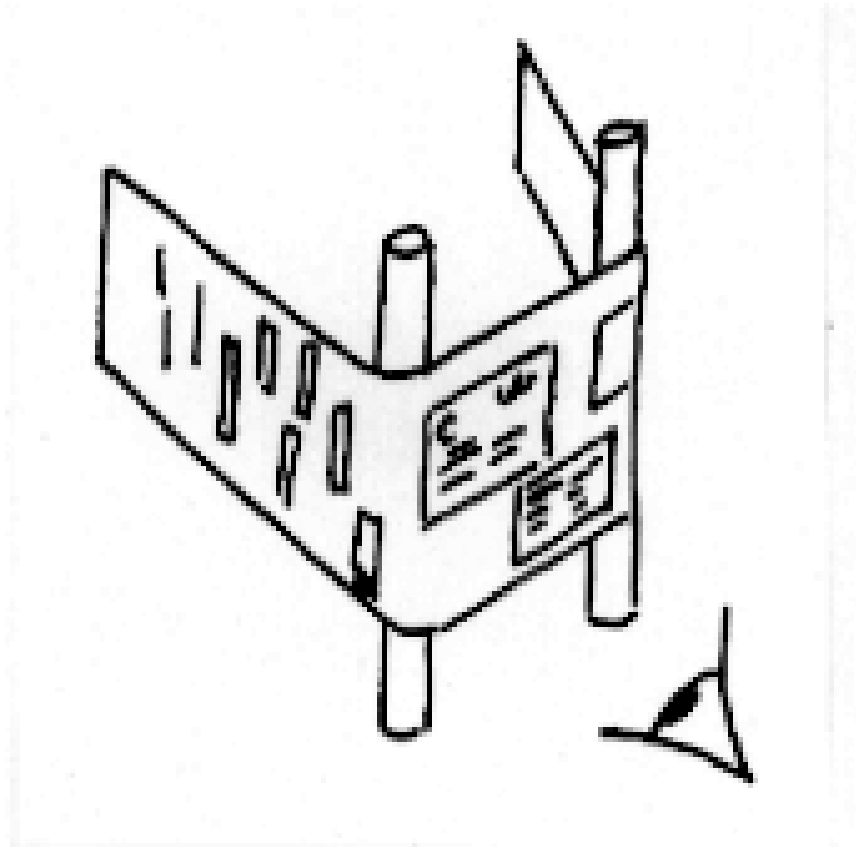


<http://www.ee.ic.ac.uk/research/information/www/Bobs.html>  
<http://portal.acm.org/citation.cfm?id=260433&dl=ACM&coll=portal>

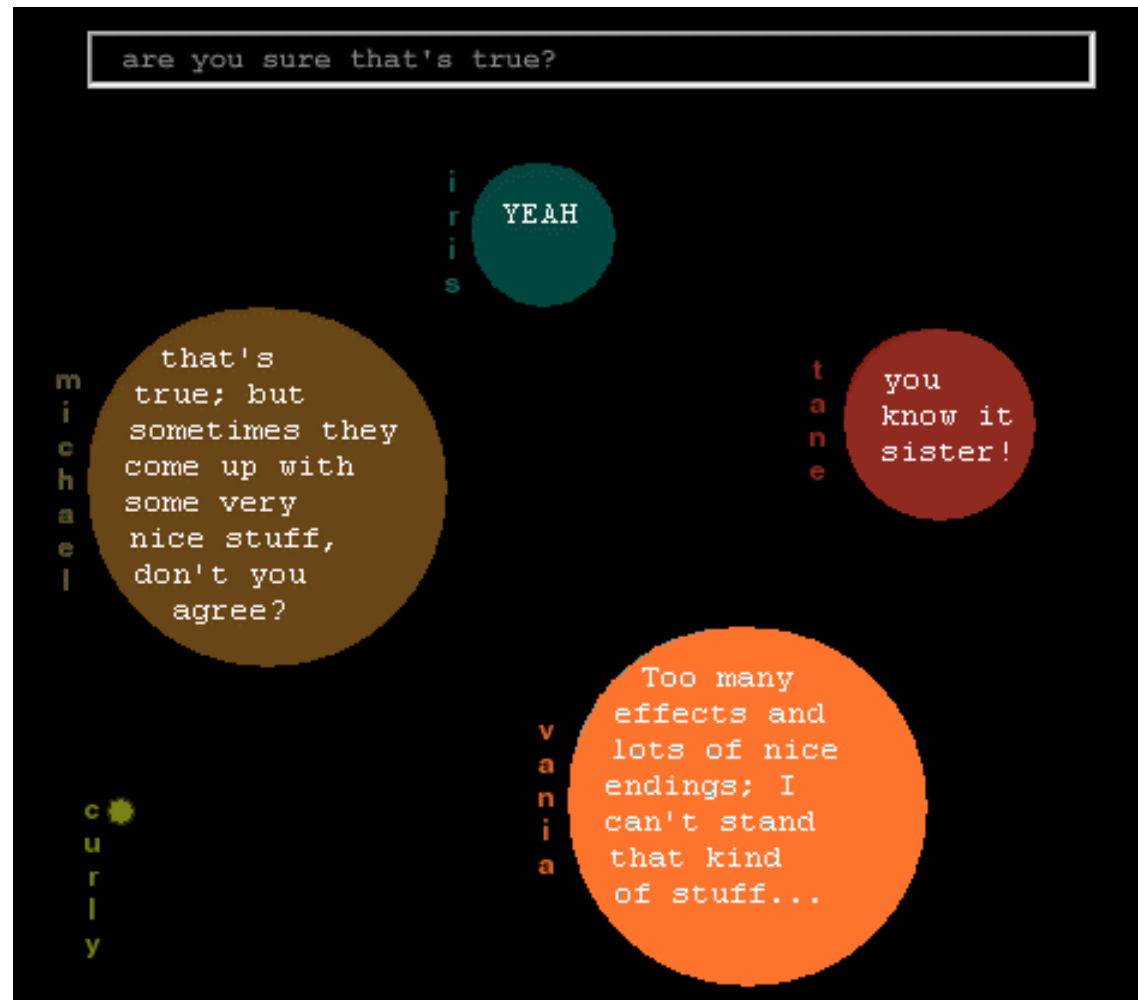
# balsa



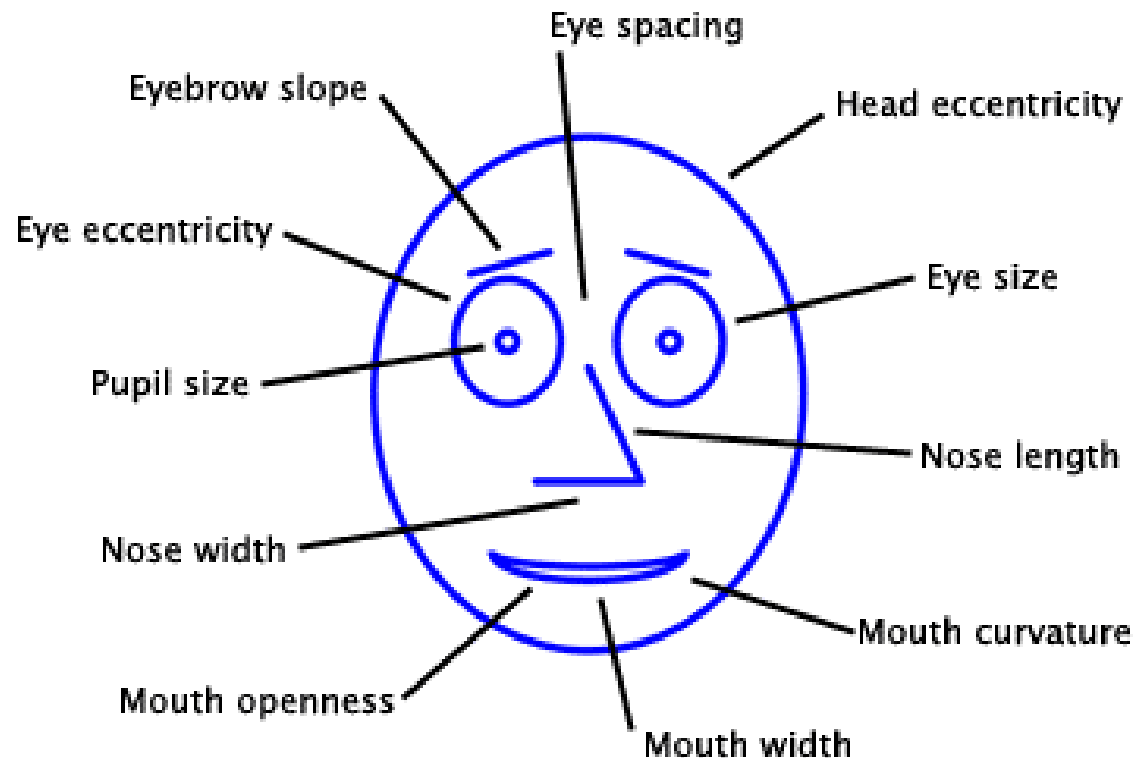
# bifocal display



# chat circle



# chernoff face

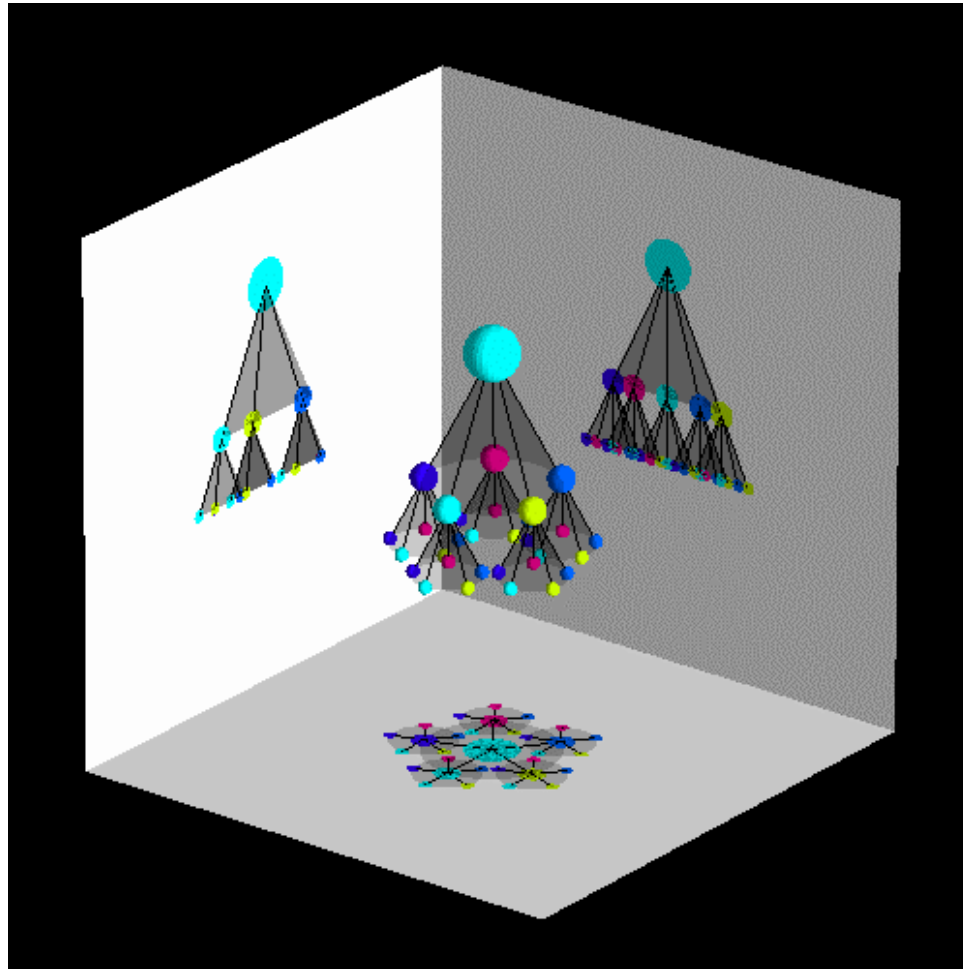


Chernoff, H. (1973). Using faces to represent points in k-dimensional space graphically. *Journal of American Statistical Association*, 68, 361-368.

Chernoff, H., & Rizvi, M. H. (1975). Effect on classification error or random permutations of features in representing multivariate data by faces. *Journal of American Statistical Association*, 70, 548-554.

<http://www.bradandkathy.com/images/face.gif>

# cone tree



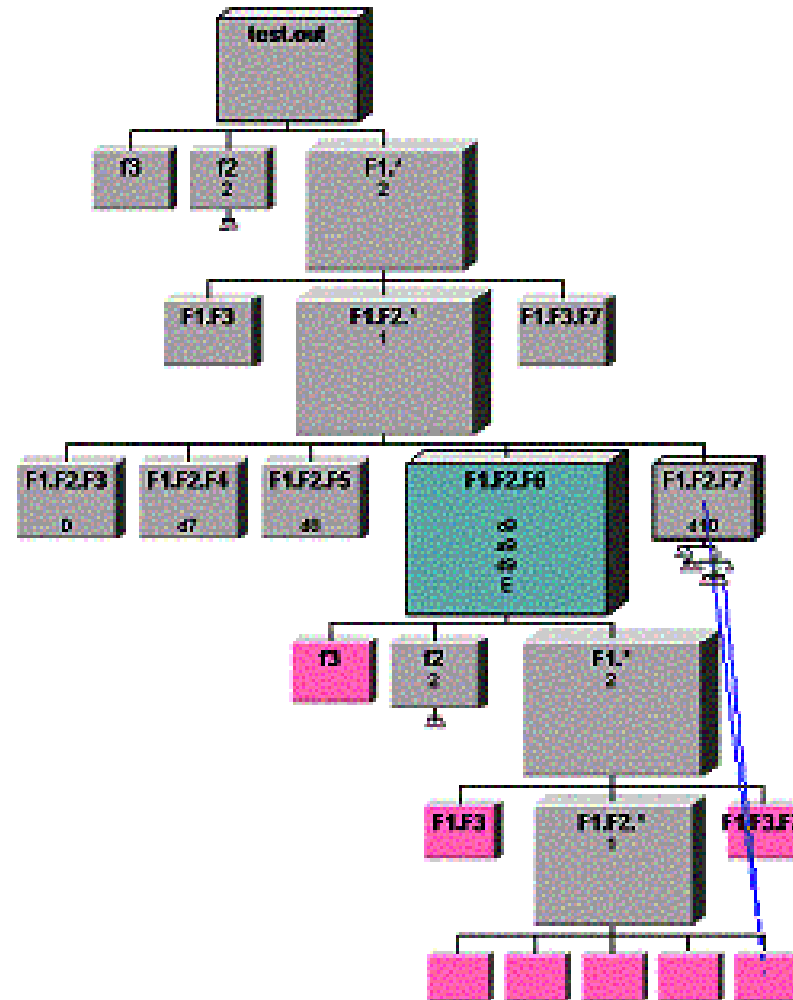


# data mountain



<http://www1.cs.columbia.edu/~paley/spring03/assignments/HW3/gwc2001/mountain.jpg>

# doi tree



# disk tree

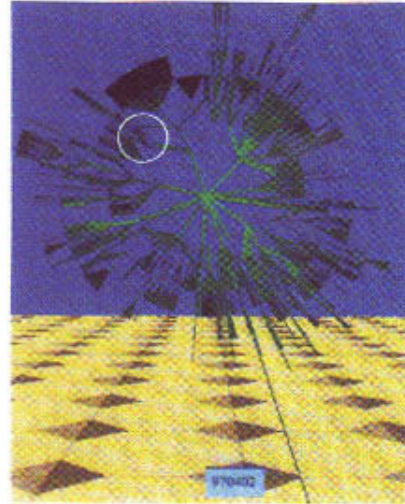


Figure 3: Week 1, April 1997

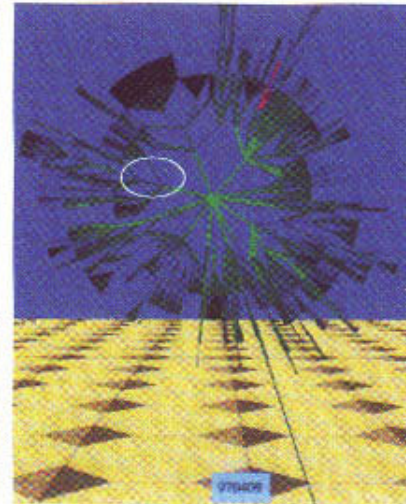


Figure 4: Week 2, April 1997

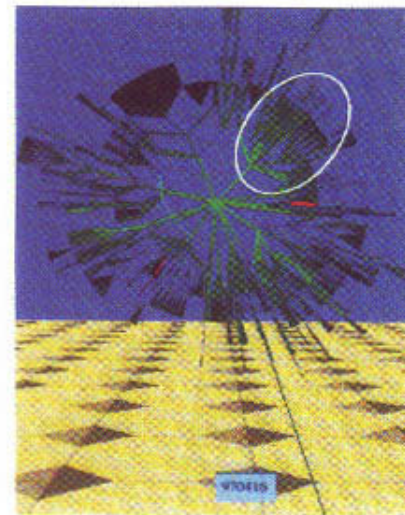


Figure 5: Week 3, April 1997

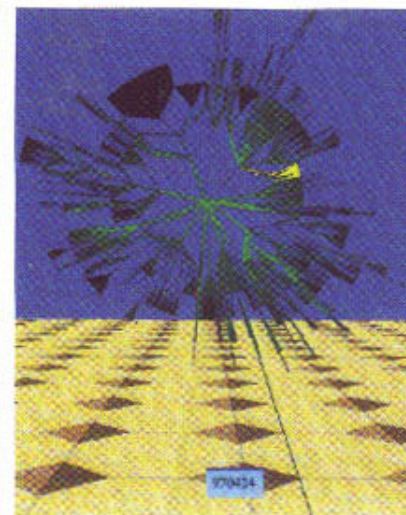
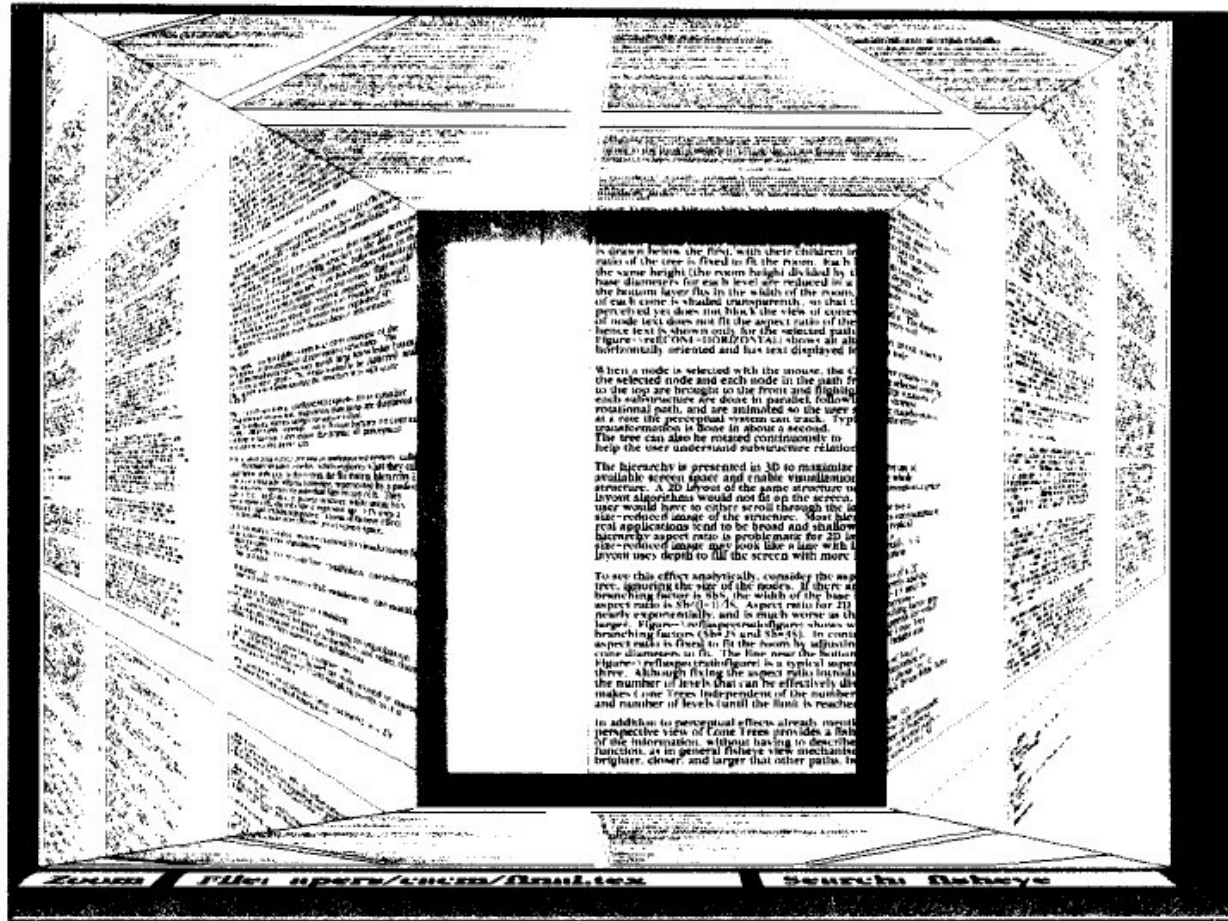


Figure 6: Week 4, April 1997

# document lens

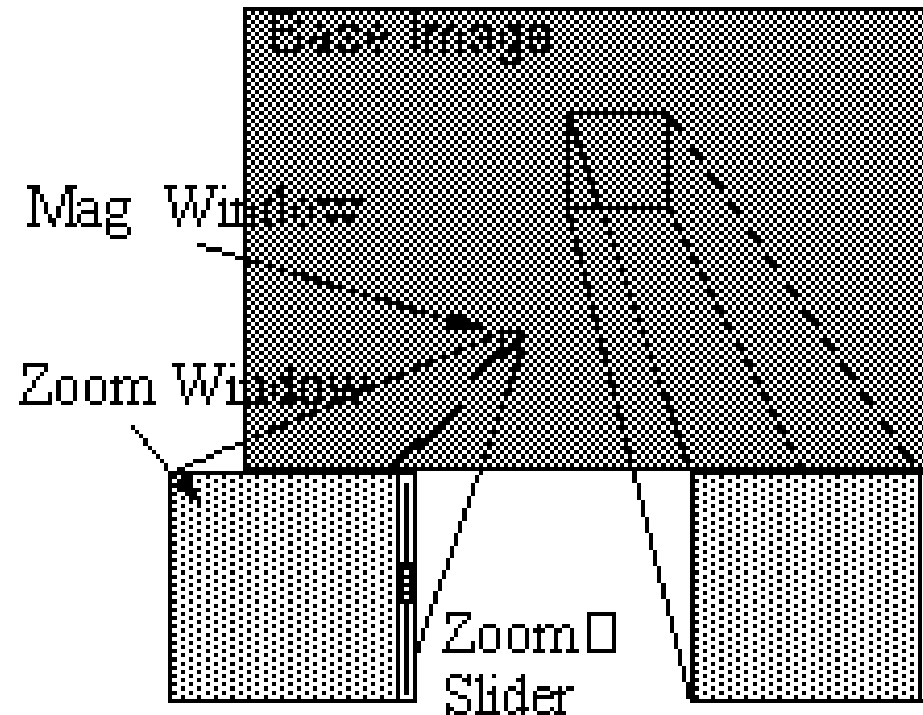


Robertson, G. G. and J. D. Mackinlay, The Document Lens, *Proceedings of the Sixth Annual ACM Symposium on User Interface Software and Technology (UIST '93)*, Nov. 3--5, 1993, Atlanta, pp. 101--107.

<http://class.ee.iastate.edu/berleant/home/Courses/text/TextVisualization/DocumentLens.jpg>

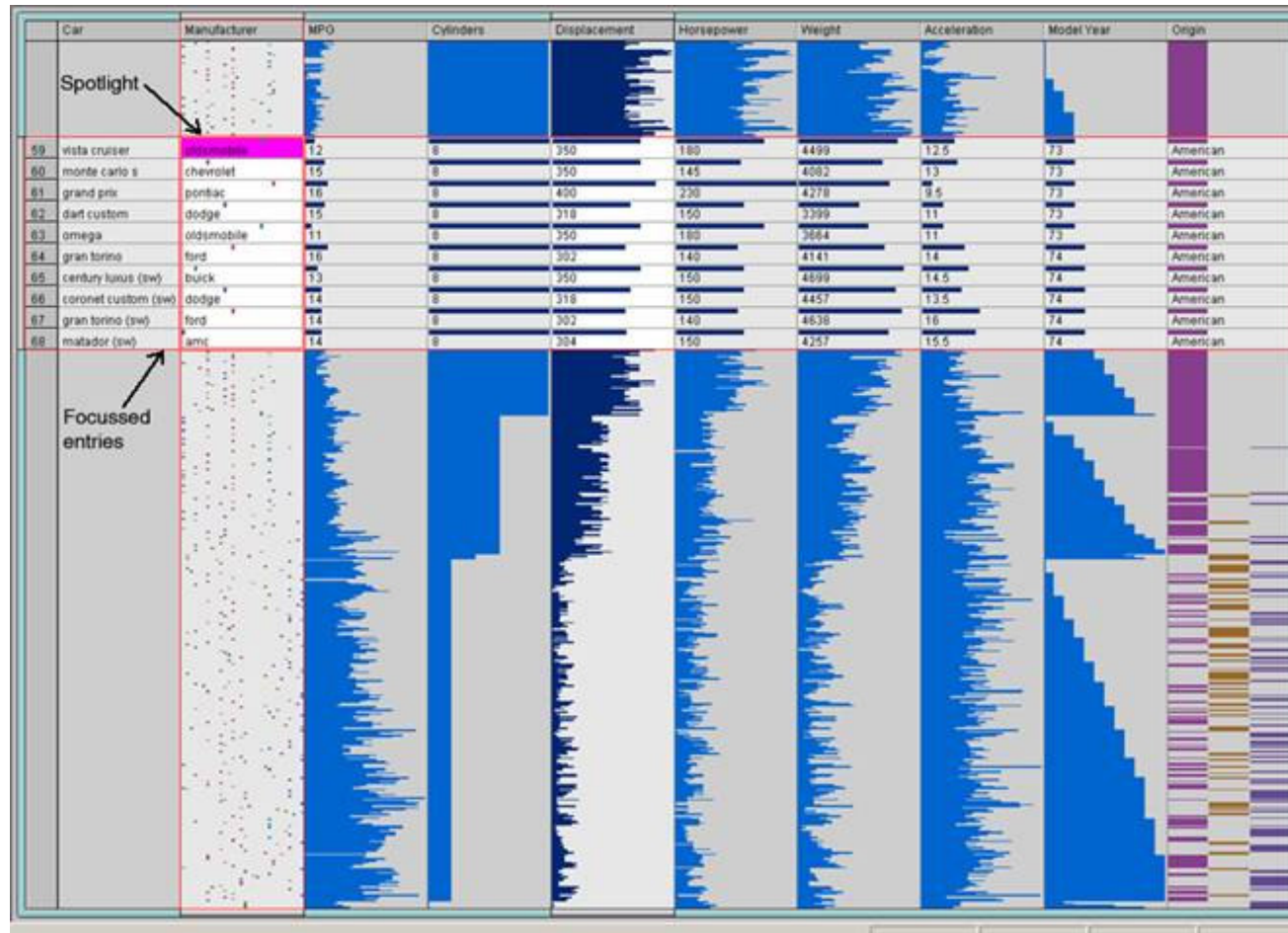
# dragmag

## Drag Mag Prototype 1

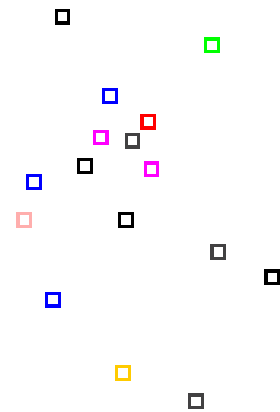
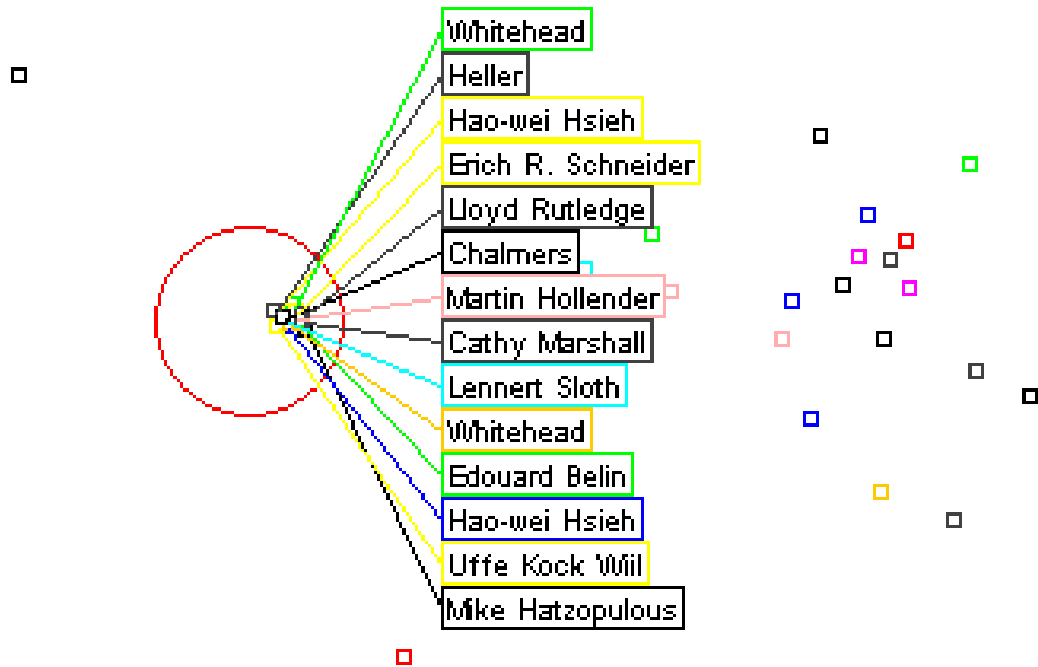




# eureka



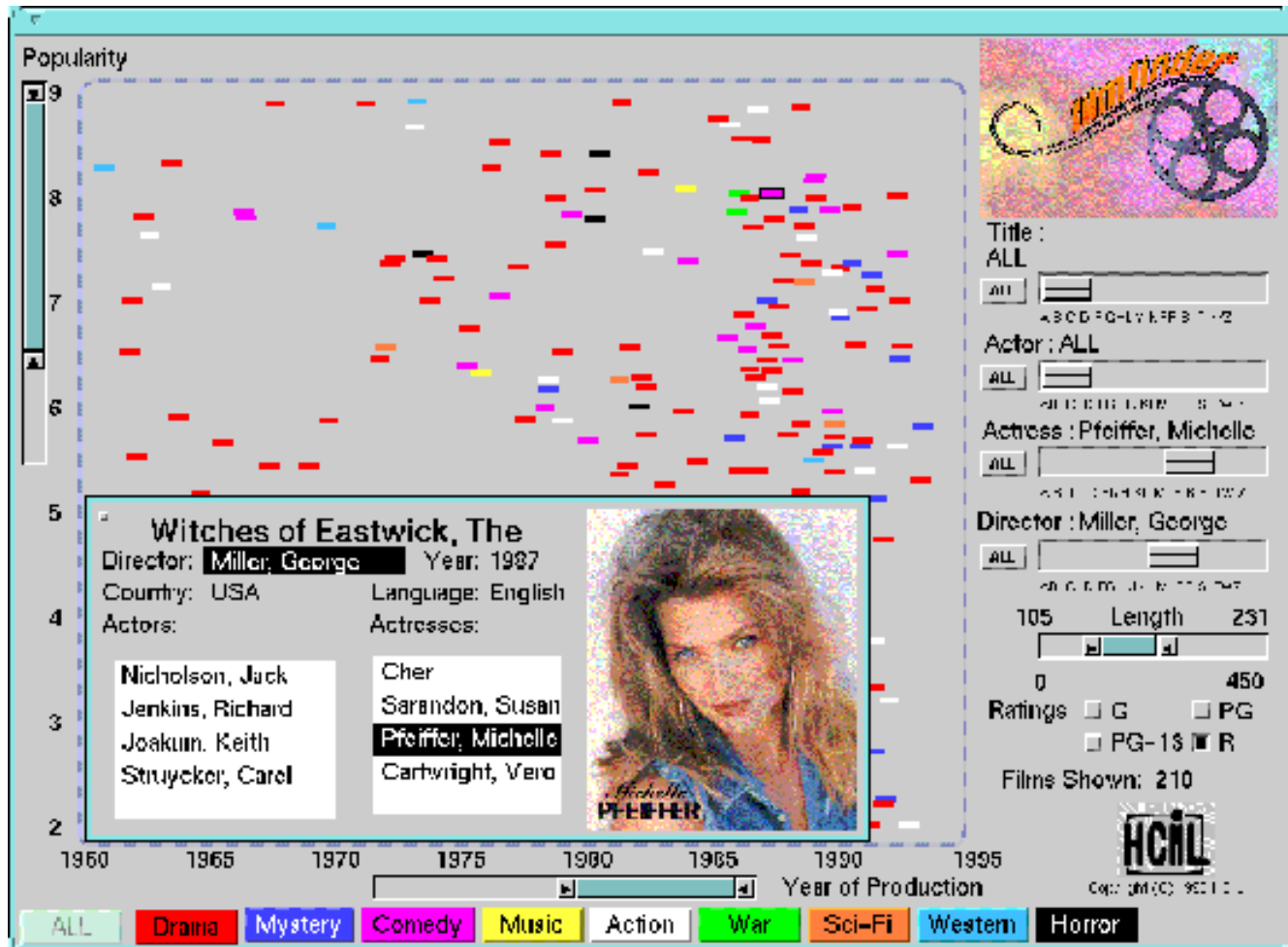
# excentric labeling



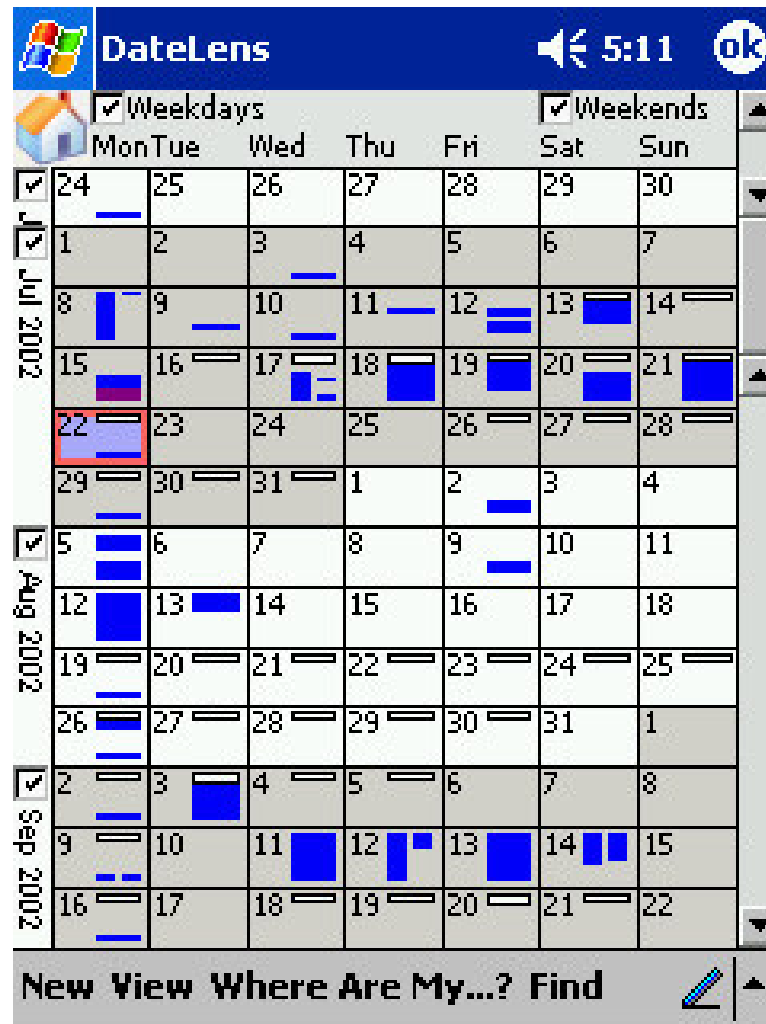




# filmfinder



# fishcal



# fisheye view

```
1 #include <stdio.h>
2 #define DIG 40
3 #include <stdio.h>
4 main()
5 {
6     int c, i, x[DIG/4], t[DIG/4], k = DIG/4, noprint = 0;
7     while((c=getchar()) != EOF){
8         if(c >= '0' && c <= '9'){
9             } else {
10                switch(c){
11                    case '+':
12                    case '-':
13                    case 'e':
14                        for(i=0; i<k; i++) t[i] = x[i];
15                        break;
16                    case 'q':
17                    default:
18                }
19                if(!noprint){
20                }
21            }
22            noprint = 0;
23        }
24    }
```

```
1 #define DIG 40
2 #include <stdio.h>
... 4 main()
5 {
6     int c, i, x[DIG/4], t[DIG/4], k = DIG/4, noprint = 0;
... 8     while((c=getchar()) != EOF){
9         if(c >= '0' && c <= '9'){
... 16             } else {
17                 switch(c){
18                     case '+':
19                     case '-':
... 27                     case 'e':
38                         for(i=0; i<k; i++) t[i] = x[i];
39                         break;
40                     case 'q':
41                     default:
... 43                 }
44                 if(!noprint){
... 47                 }
48             }
... 57             noprint = 0;
58         }
59     }
60 }
61 }
```

Figure 4(b). A fisheye view of the C program. Line numbers are in the left margin. "..." indicates missing lines. ">>" signals the current line.

# fluid text

When in the Course of human Events, it becomes necessary for one People to dissolve the Political Bands which have connected them with another, and to assume among the Powers of the Earth, the separate and equal Station to which the Laws of Nature and of Nature's God entitle them, a decent Respect to the Opinions of Mankind requires that they should declare the causes which impel them to the Separation.

We hold these Truths to be self-evident, that all Men are created

**As unequal in many ways as humans may be, no one human or class of humans is superior to another human or class of humans.**

equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the Pursuit of Happiness -- That to secure these Rights, Governments are instituted among Men, deriving their just Powers from the Consent of the Governed, that whenever any Form of Government

When in the Course of human Events, it becomes necessary for one People to dissolve the Political Bands which have connected them with another, and to assume among the Powers of the Earth, the separate and equal Station to which the Laws of Nature and of Nature's God entitle them, a decent Respect to the Opinions of Mankind requires that they should declare the causes which impel them to the Separation.

We hold these Truths to be self-evident, that all Men are created

equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the Pursuit of Happiness -- That to secure these Rights, Governments are instituted among Men, deriving their just Powers from the Consent of the Governed, that whenever any Form of Government becomes destructive of these Ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its

**As unequal in many ways as humans may be, no one human or class of humans is superior to another human or class of humans.**

When in the Course of human Events, it becomes necessary for one People to dissolve the Political Bands which have connected them with another, and to assume among the Powers of the Earth, the separate and equal Station to which the Laws of Nature and of Nature's God entitle them, a decent Respect to the Opinions of Mankind requires that they should declare the causes which impel them to the Separation.

We hold these Truths to be self-evident, that all Men are created

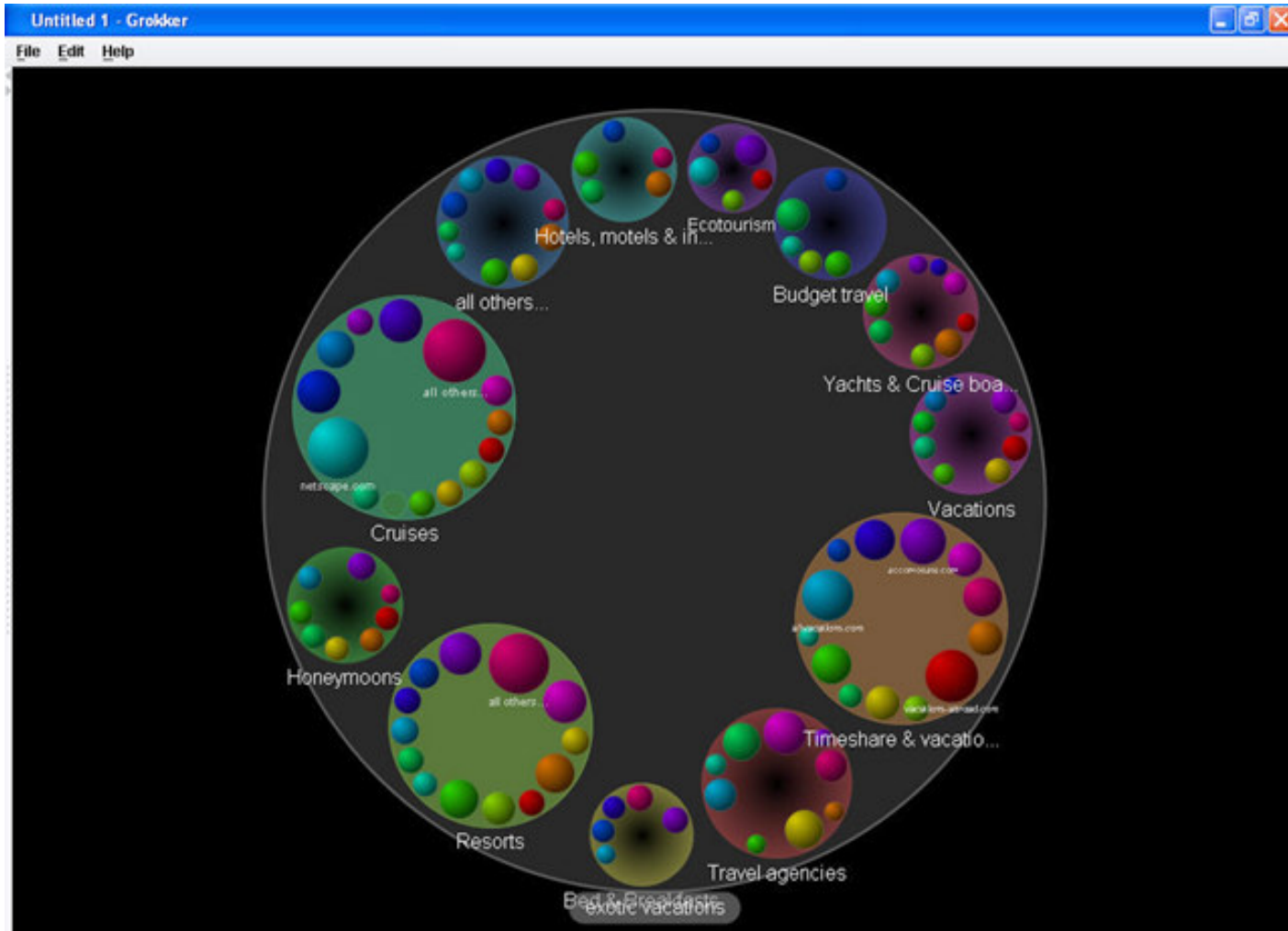
equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the Pursuit of Happiness -- That to secure these Rights, Governments are instituted among Men, deriving their just Powers from the Consent of the Governed, that whenever any Form of Government becomes destructive of these Ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its

**As unequal in many ways as humans may be, no one human or class of humans is superior to another human or class of humans.**





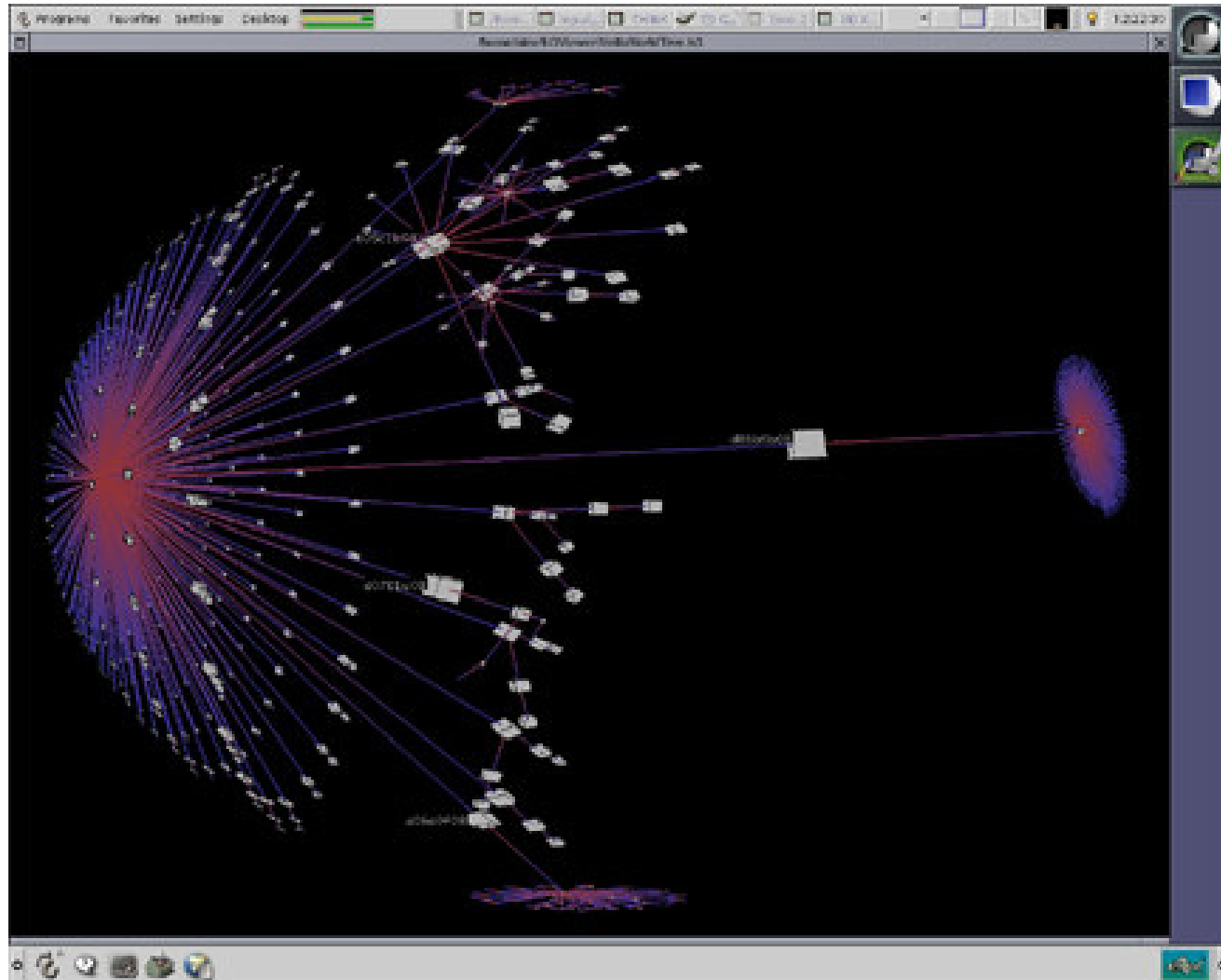
# grokker



[http://www.xenky.com/news/ITBulletin\\_files/grokmap.jpg](http://www.xenky.com/news/ITBulletin_files/grokmap.jpg)

<http://www.grokker.com/>

# h3viewer



<http://www.mcs.vuw.ac.nz/~alex/ownershipvisualisations/index.shtml>  
<http://graphics.stanford.edu/~munzner/h3/>

# homefinder

**Dynamic HomeFinder**

Reset Quit  
Save Print

Dist to A:  
1 19 30

Dist to B:  
1 6 30

Bedrooms:  
1 2 4 7

Cost:  
\$50k 16 \$500k 30

Look at:  
Hse TH Cnd

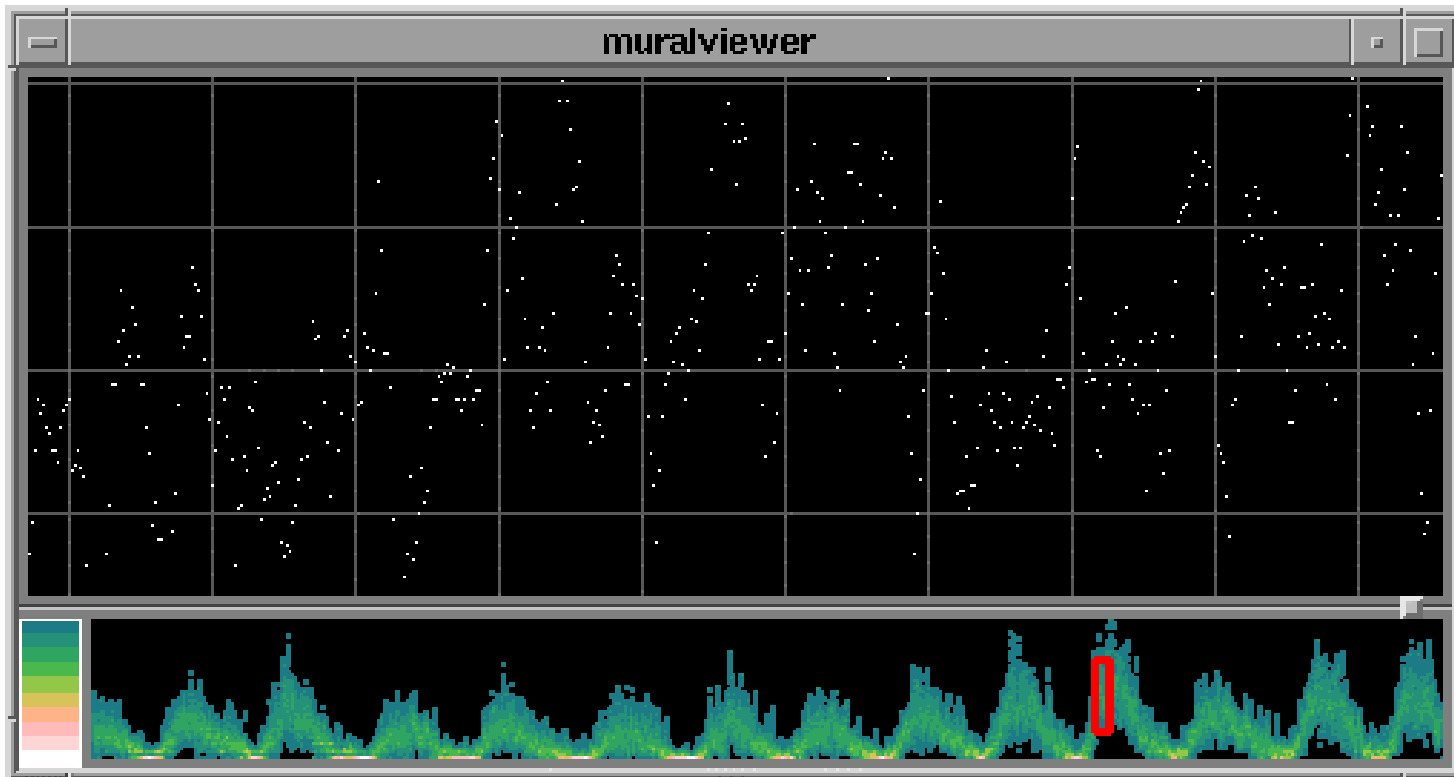
Features:  
Grg Fp1  
CAC New

The yellow dots above are homes in the DC area for sale. You may get more information on a home by selecting it. You may drag the 'A' and 'B' distance markers to your office or any other location you want to live near. Select distances, bedrooms, and cost ranges by dragging the corresponding slider boxes on the right. Select specific home types and services by pressing the labeled buttons on the right.

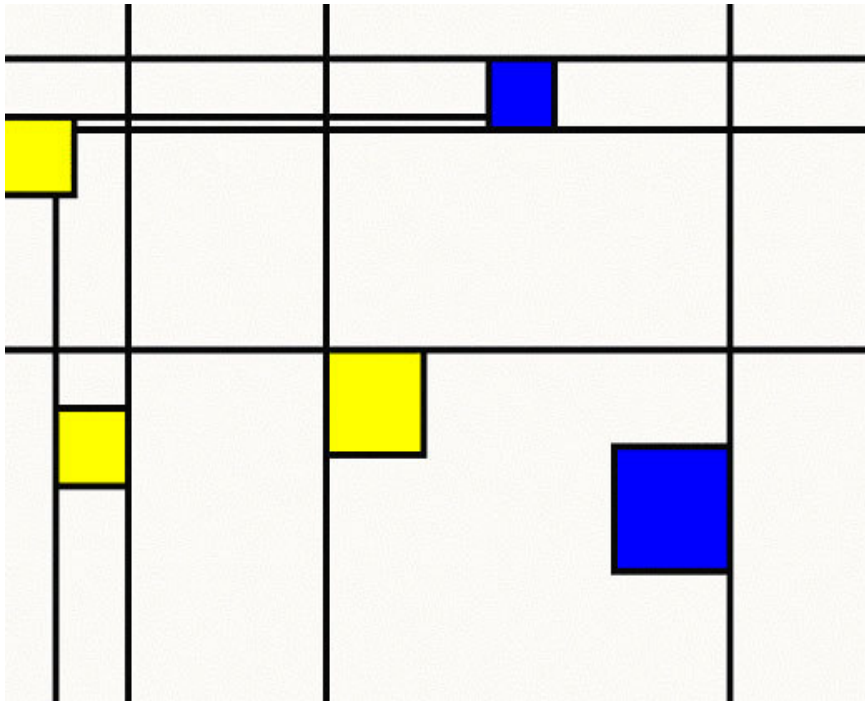




# information mural



# informative art

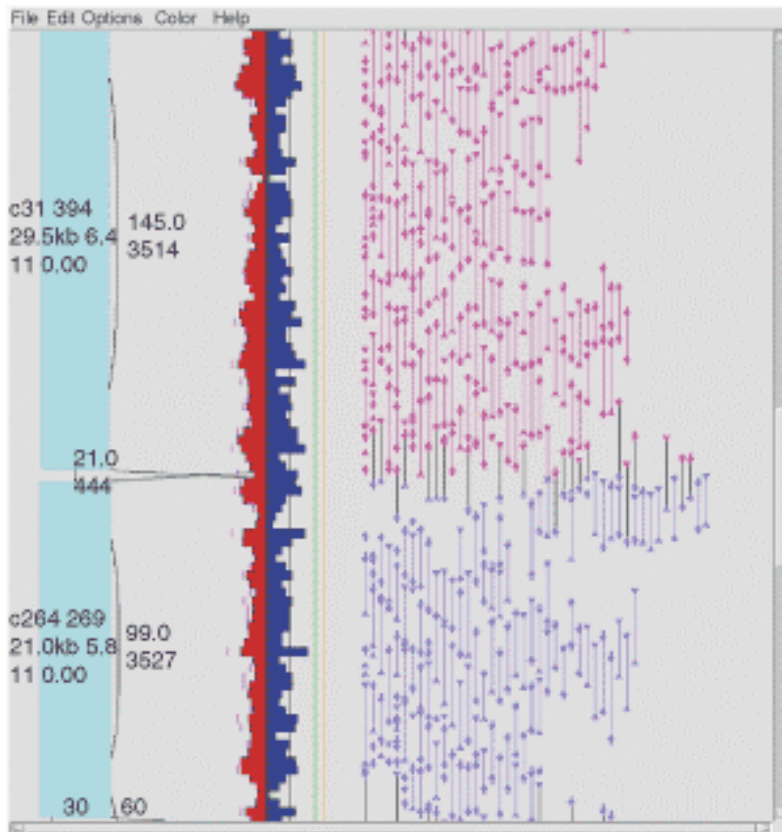


# infocanvas





# jazz



<http://www.cs.umd.edu/hcil/kidpad/>

[http://www.nersc.gov/research/annrep01/images/highlights/20sh\\_rakhsar2.gif](http://www.nersc.gov/research/annrep01/images/highlights/20sh_rakhsar2.gif)

<http://www.cs.umd.edu/hcil/jazz/index.shtml>

# kohonen map

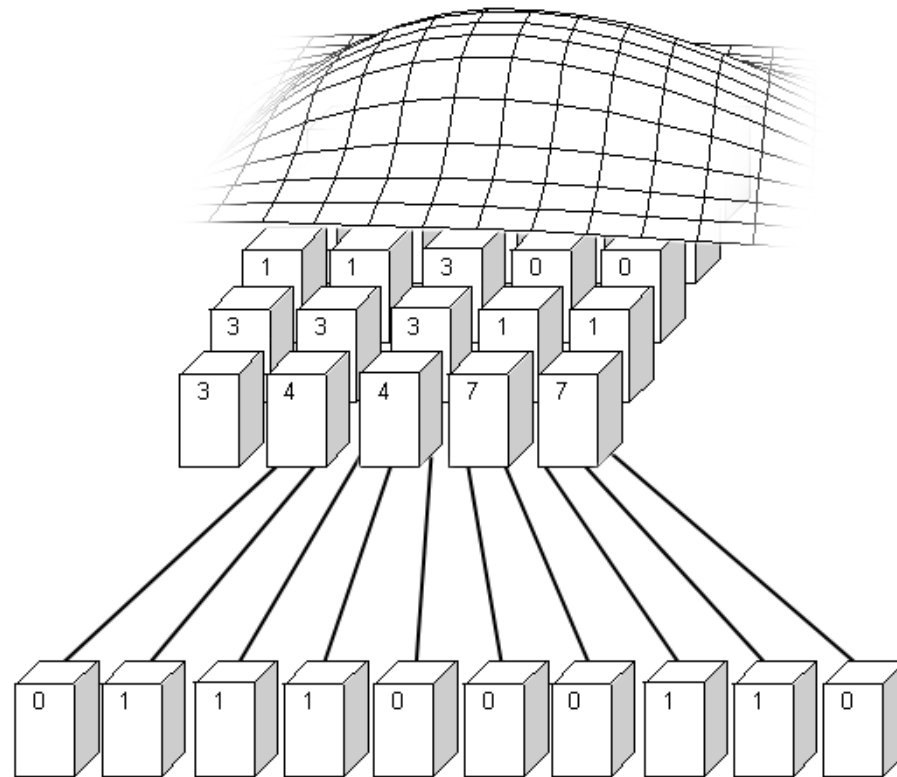


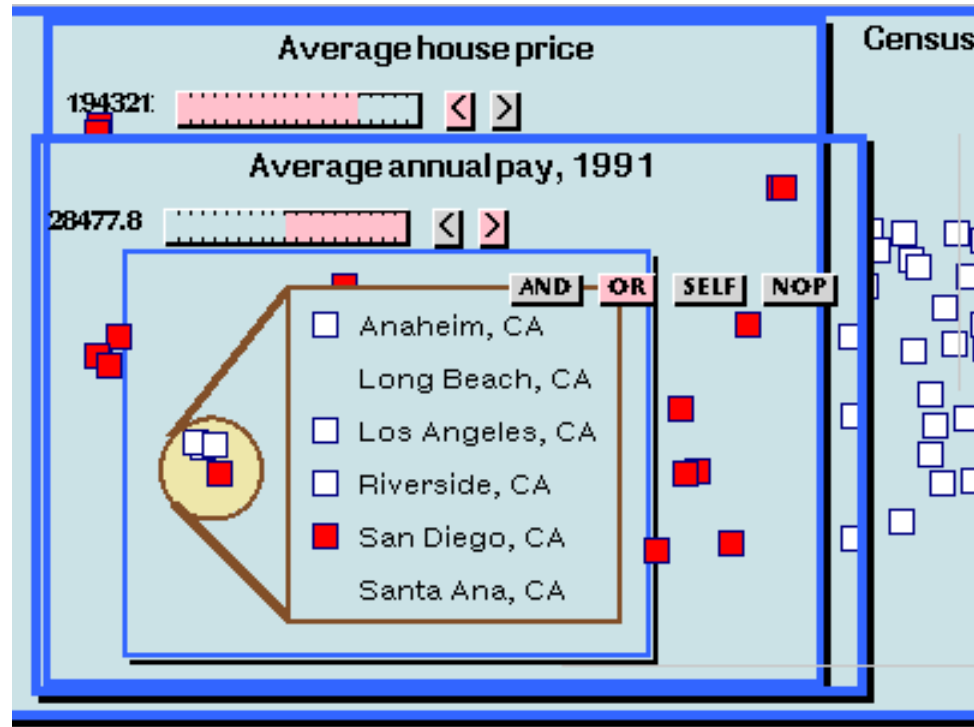
Image: <http://www.zimduction.de/stefan-zimmermann/projekte/nnf/home.html>

<http://www.cis.hut.fi/research/som-research/teuvo.html>



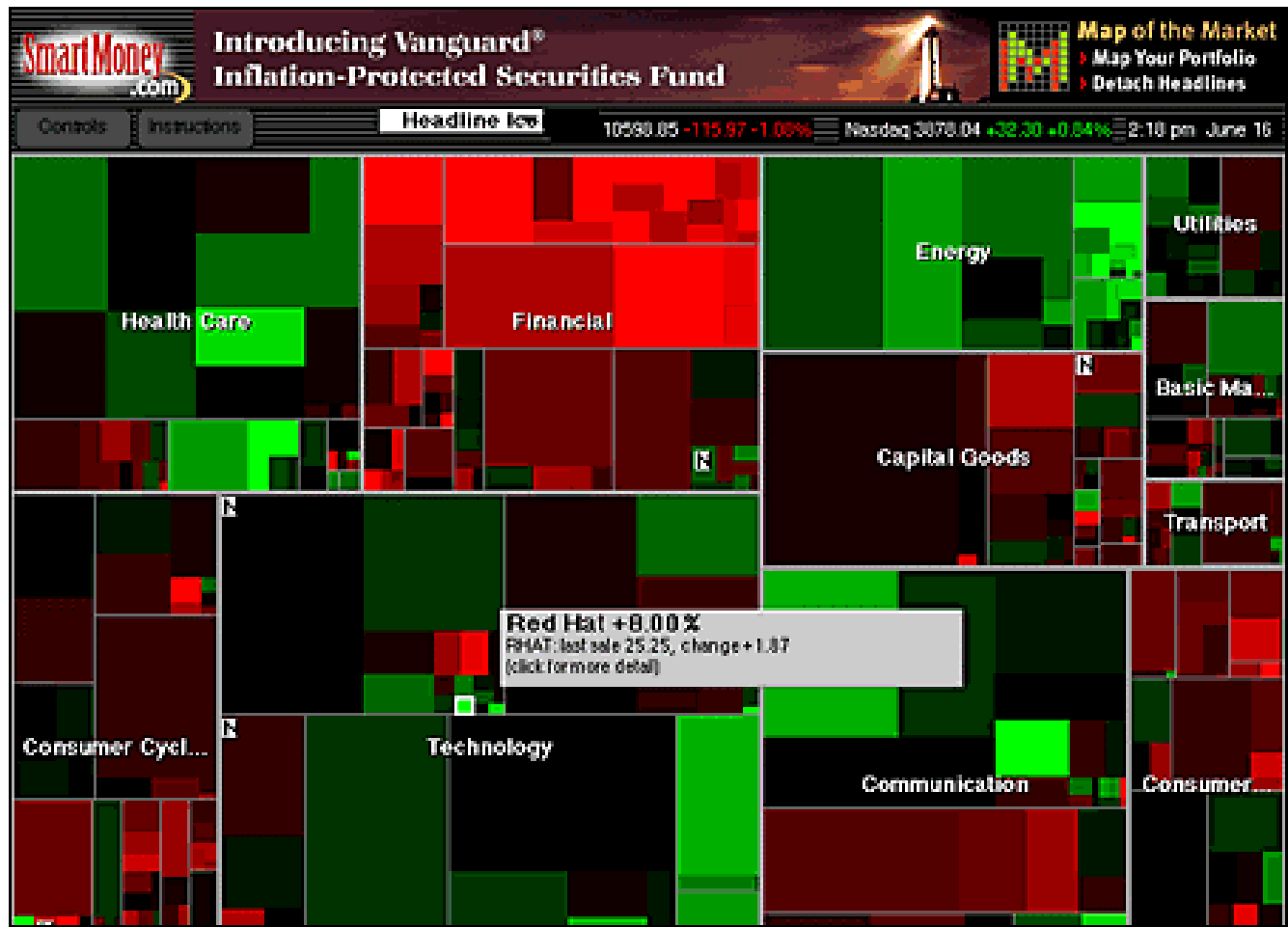


# magic lens



<http://www.sims.berkeley.edu/~hearst/irbook/10/node6.html>  
<http://www2.parc.com/istl/projects/MagicLenses/default.html>

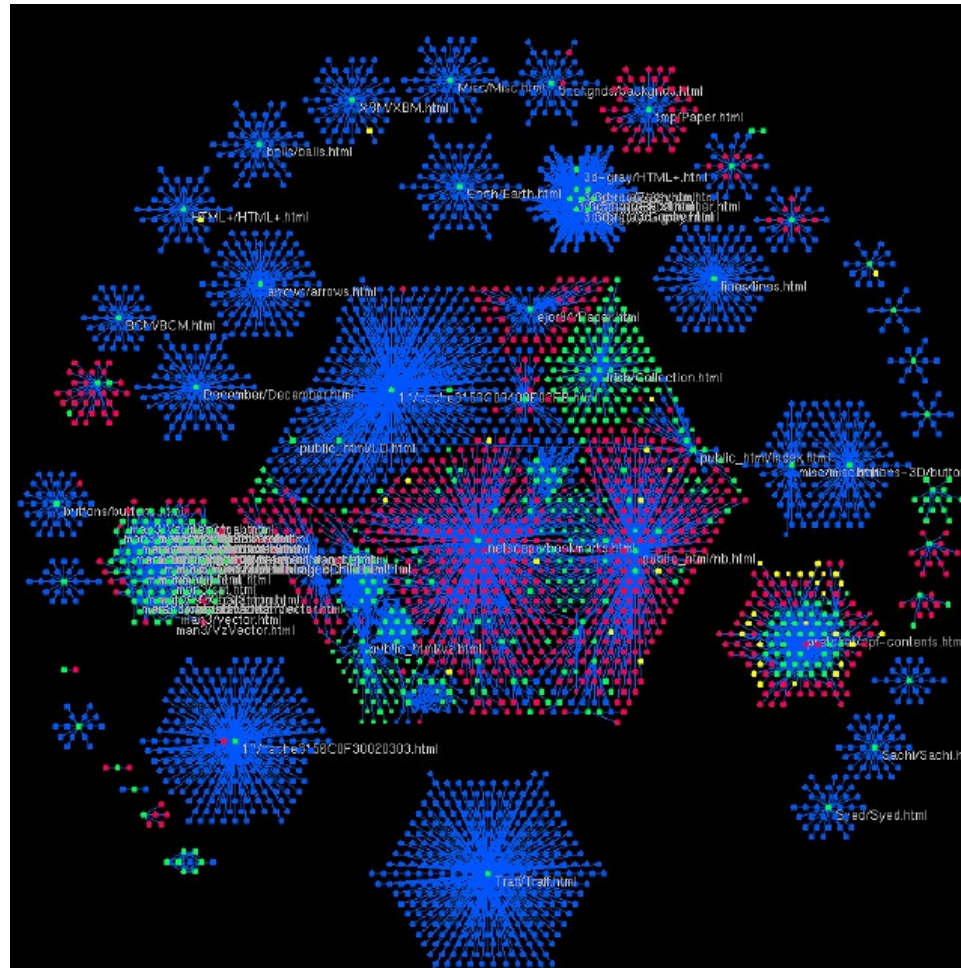
# map of the market



<http://java.sun.com/features/2000/06/images/marketmap.big.smartmoney.gif>

<http://www.smartmoney.com/marketmap/>

# nicheworks



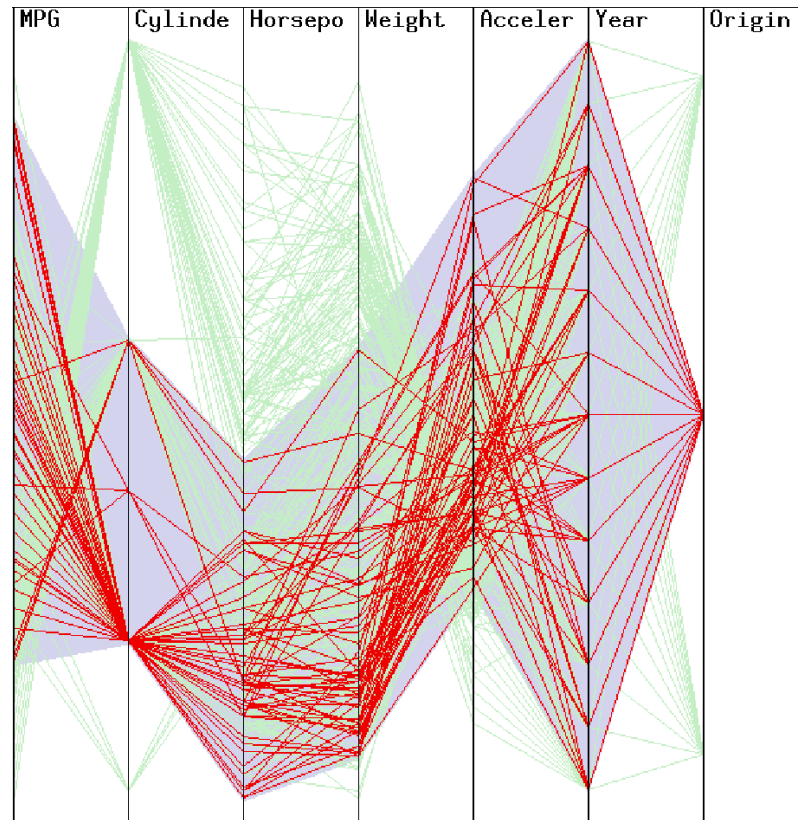
[http://infomap.service-public.org/surface/Images/nicheworks1\\_large.jpg](http://infomap.service-public.org/surface/Images/nicheworks1_large.jpg)

<http://citeseer.ist.psu.edu/wills97nicheworksinteractive.html>

# pad++



# parallel coordinates

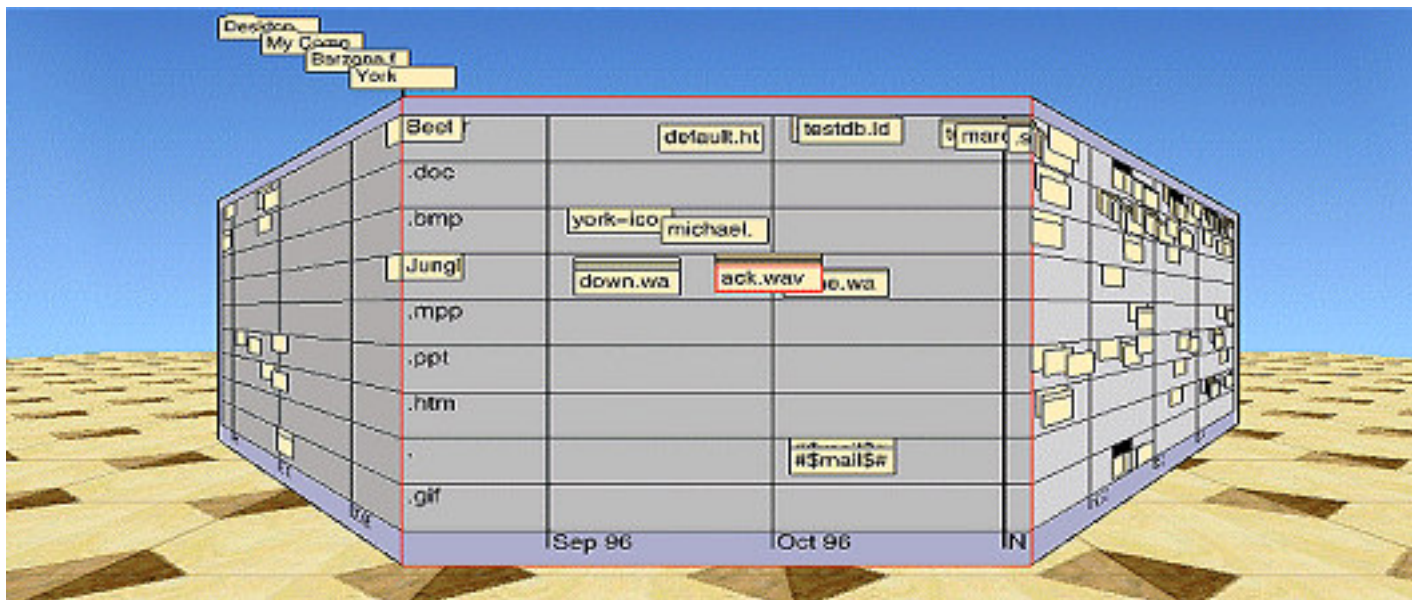


A. Inselberg and B. Dimsdale. *Parallel coordinates: A tool for visualizing multidimensional geometry*. Proc. of Visualization '90, p. 361-78, 1990.

# peoplegarden

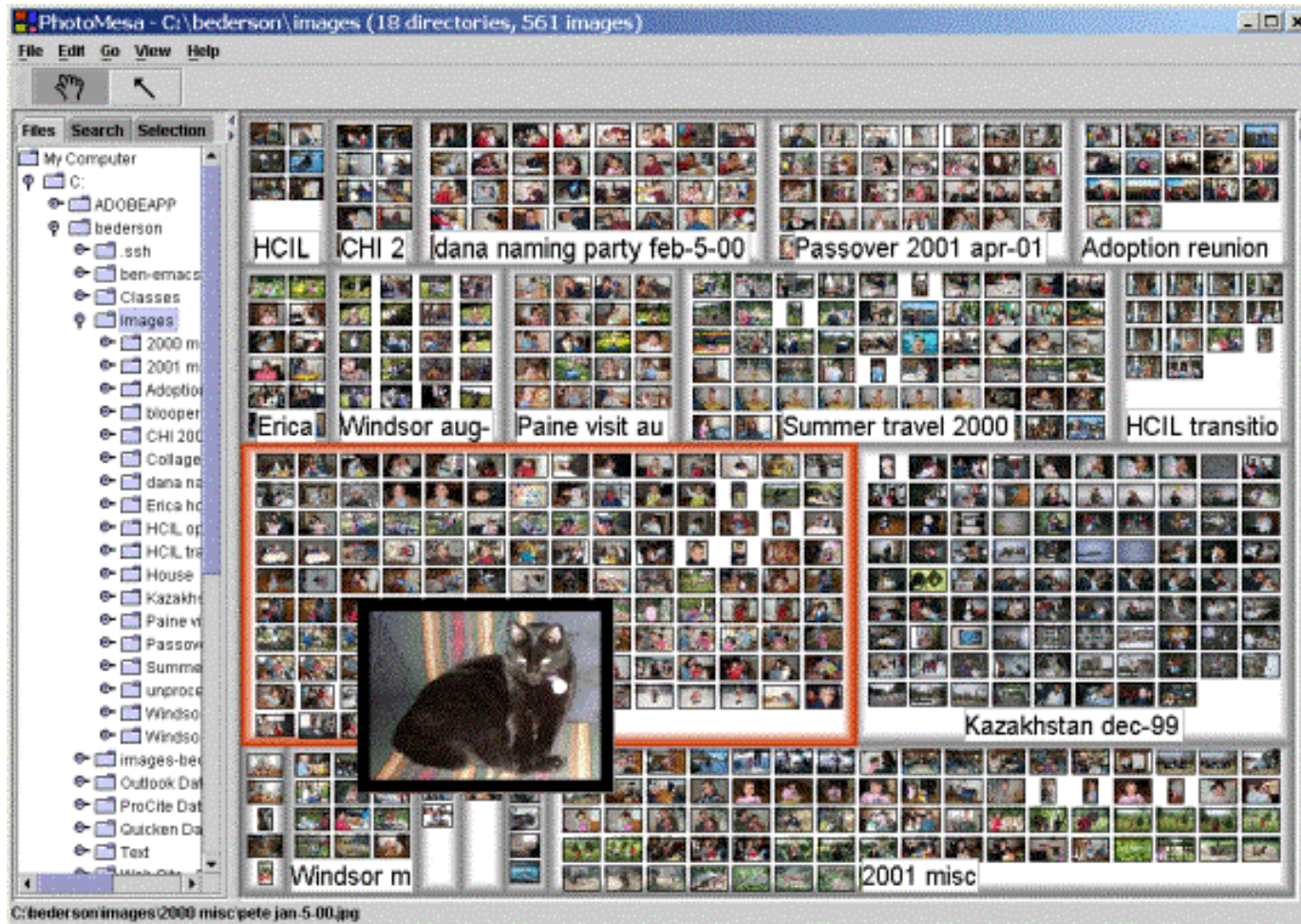


# perspective wall



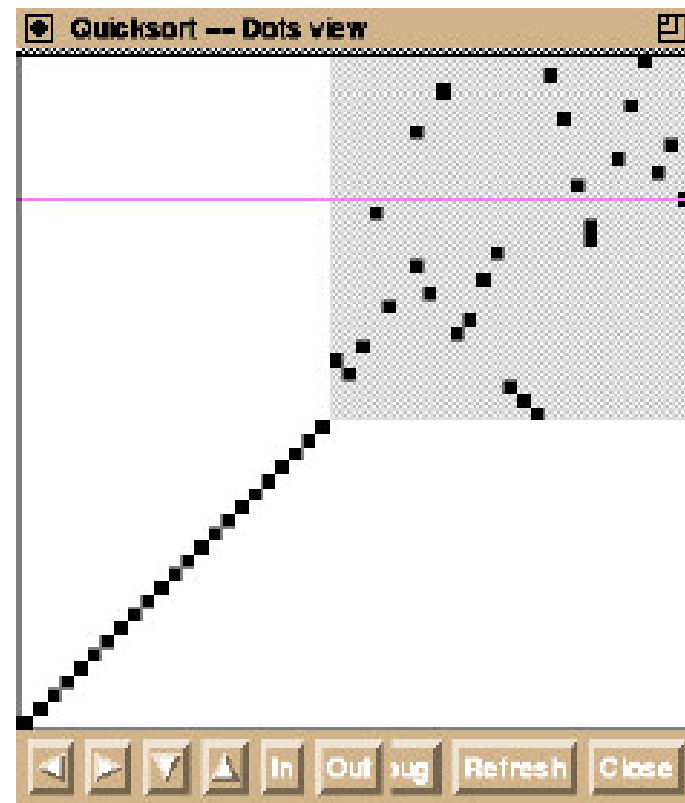
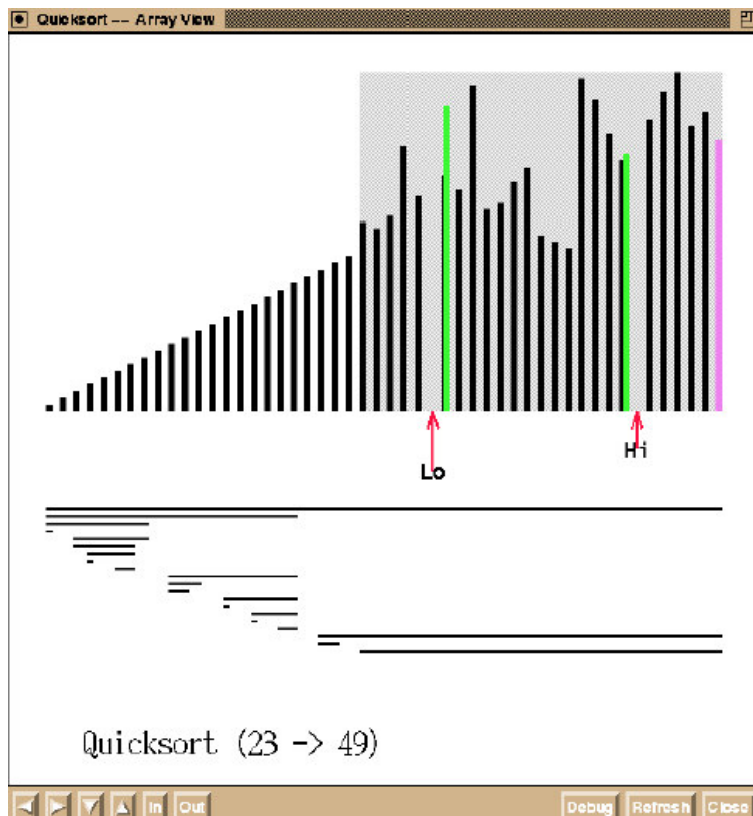


# photomesa



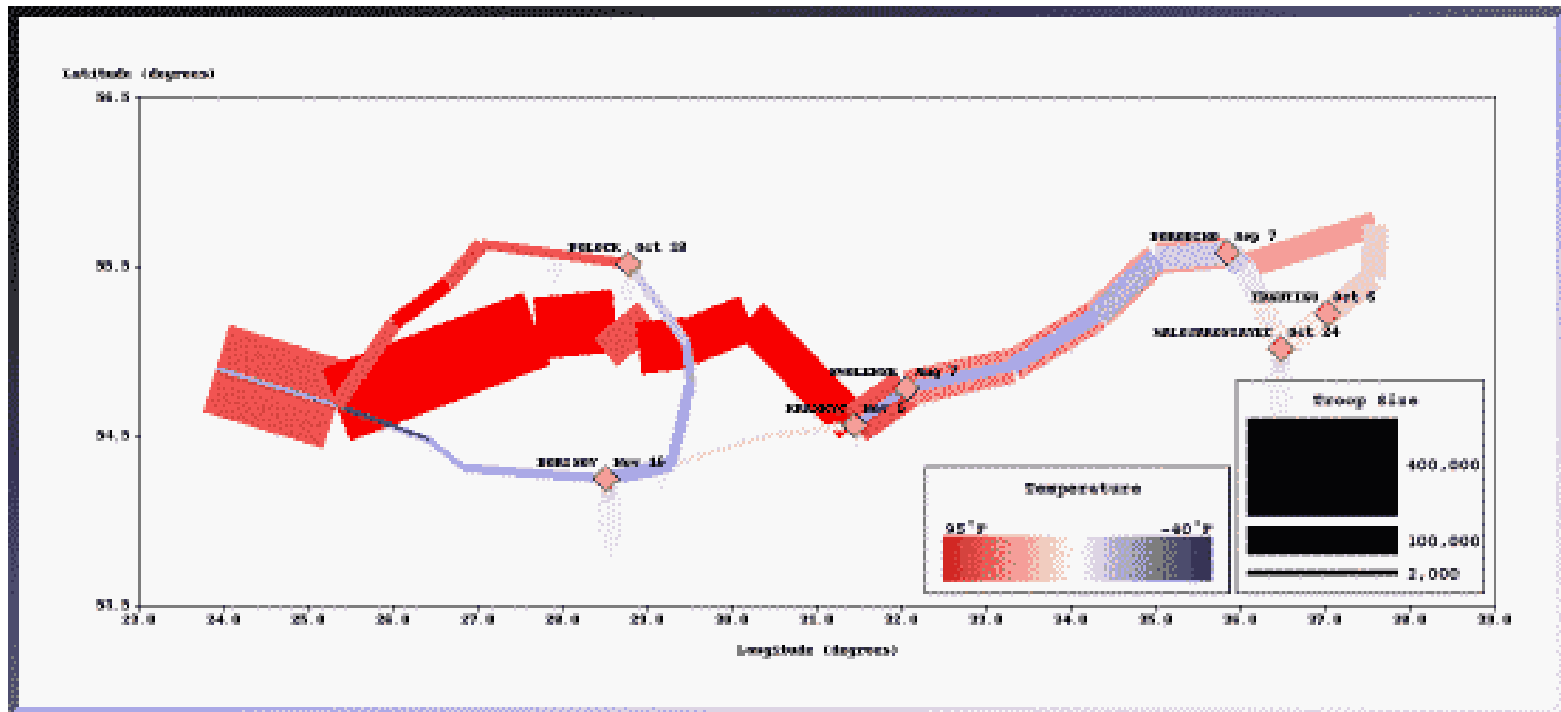


# polka

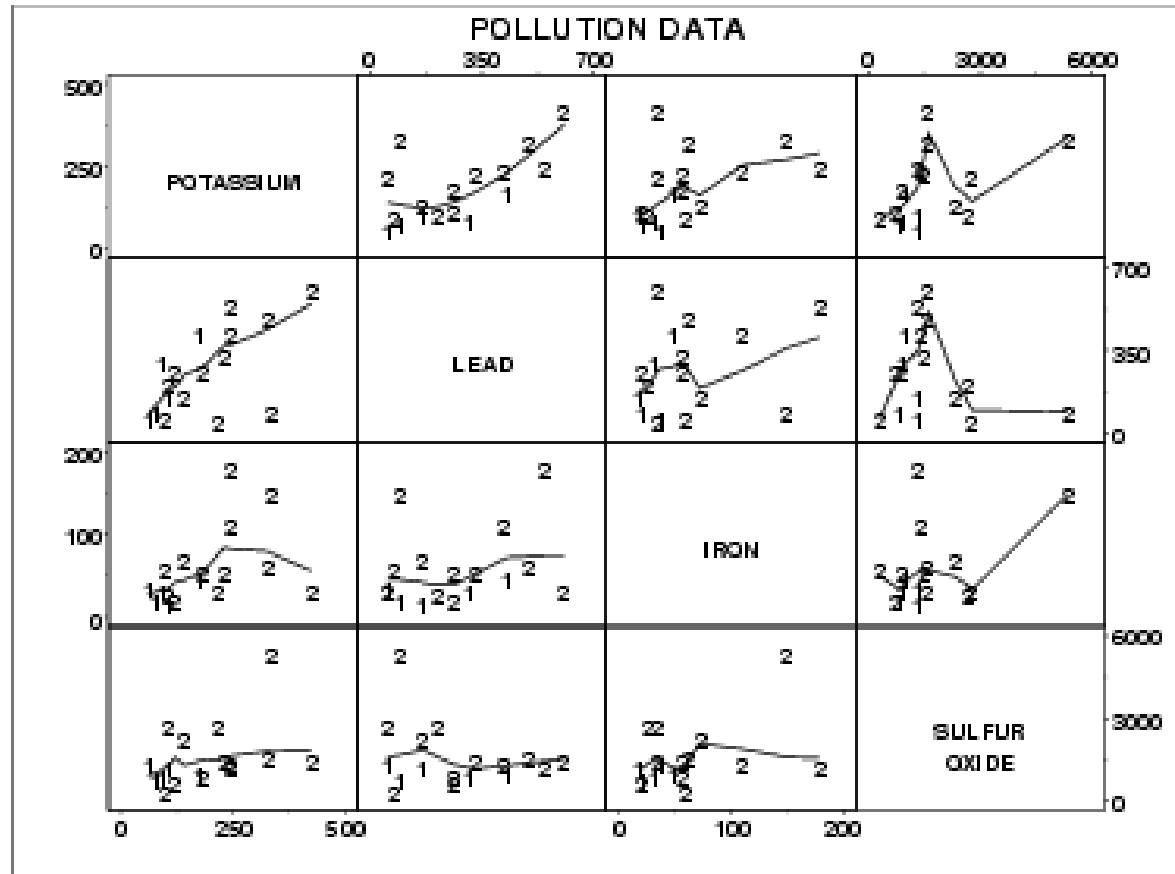




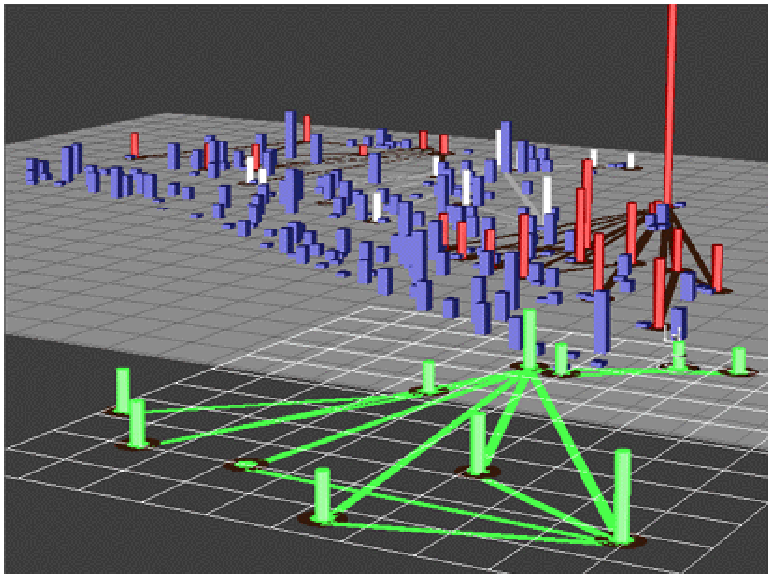
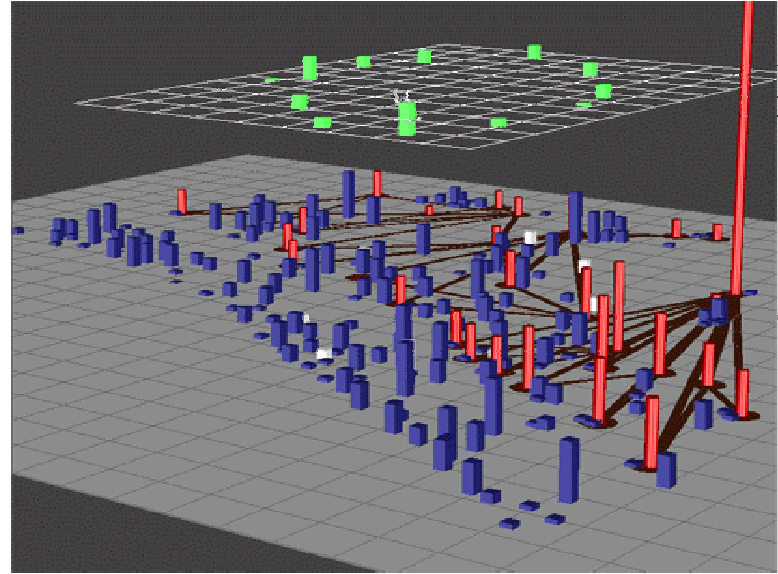
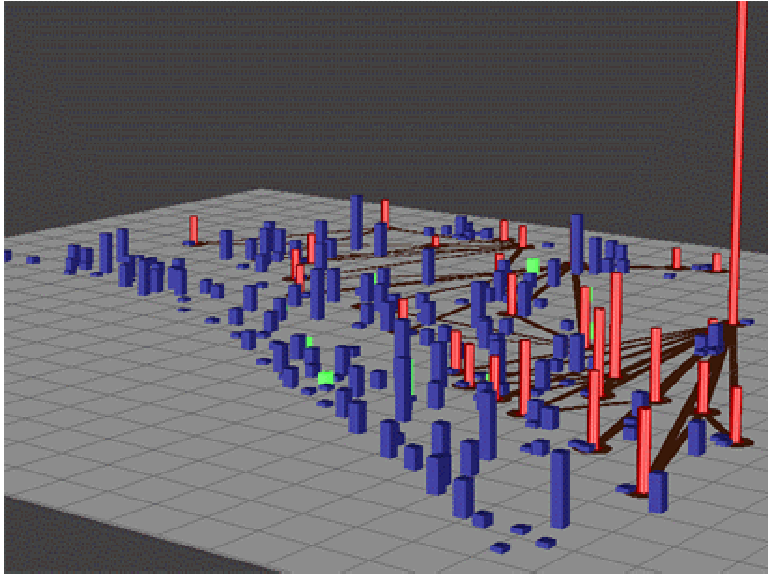
# sage



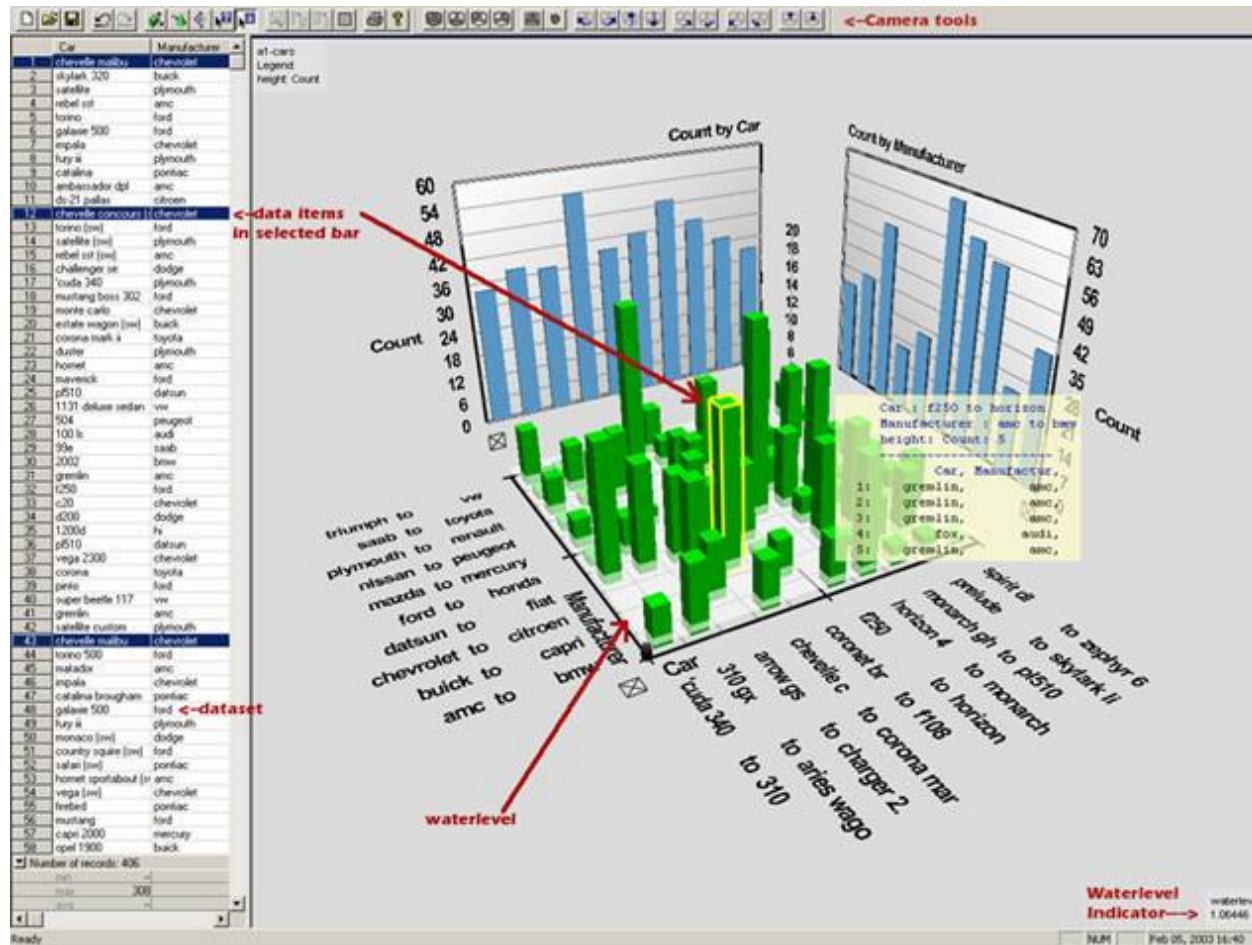
# scatterplot matrix



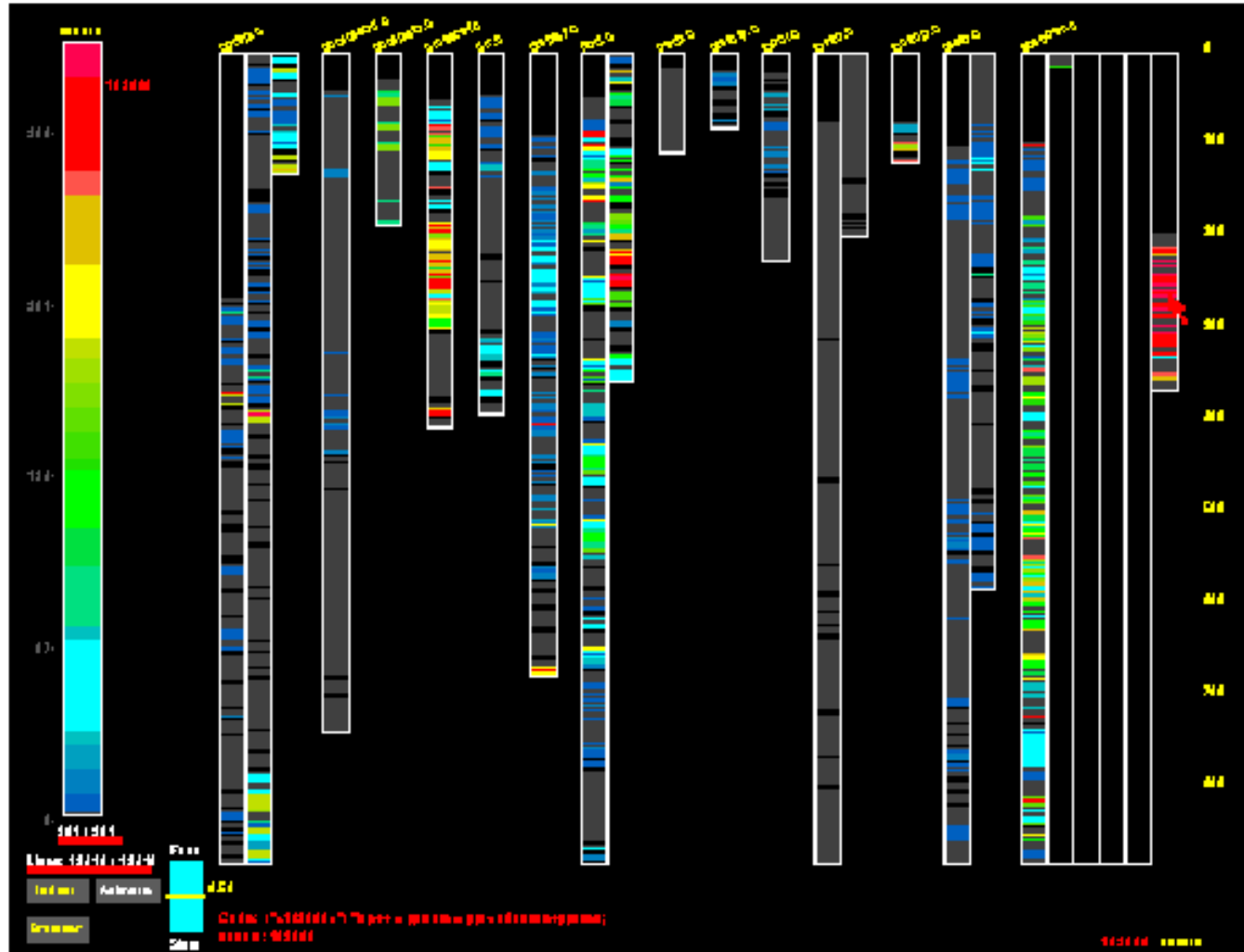
# sdm



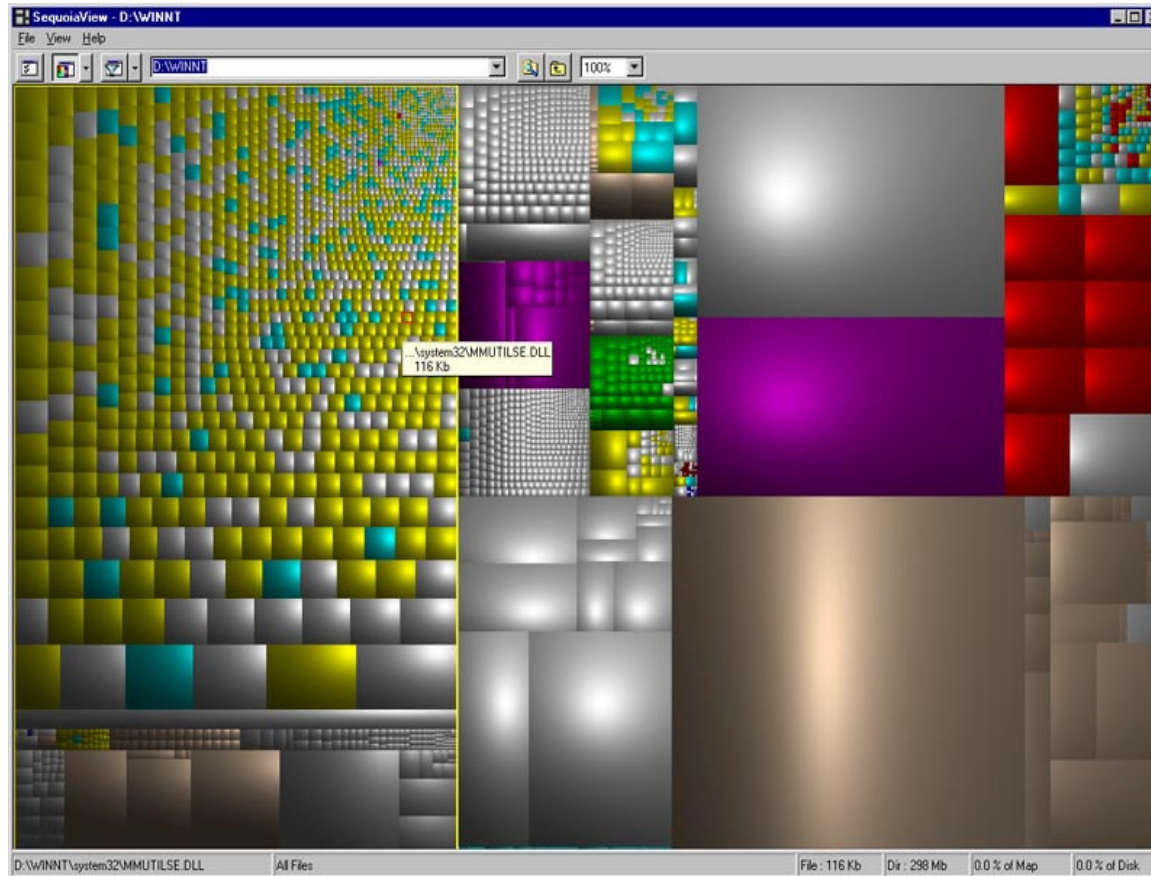
# seeit



# seesoft

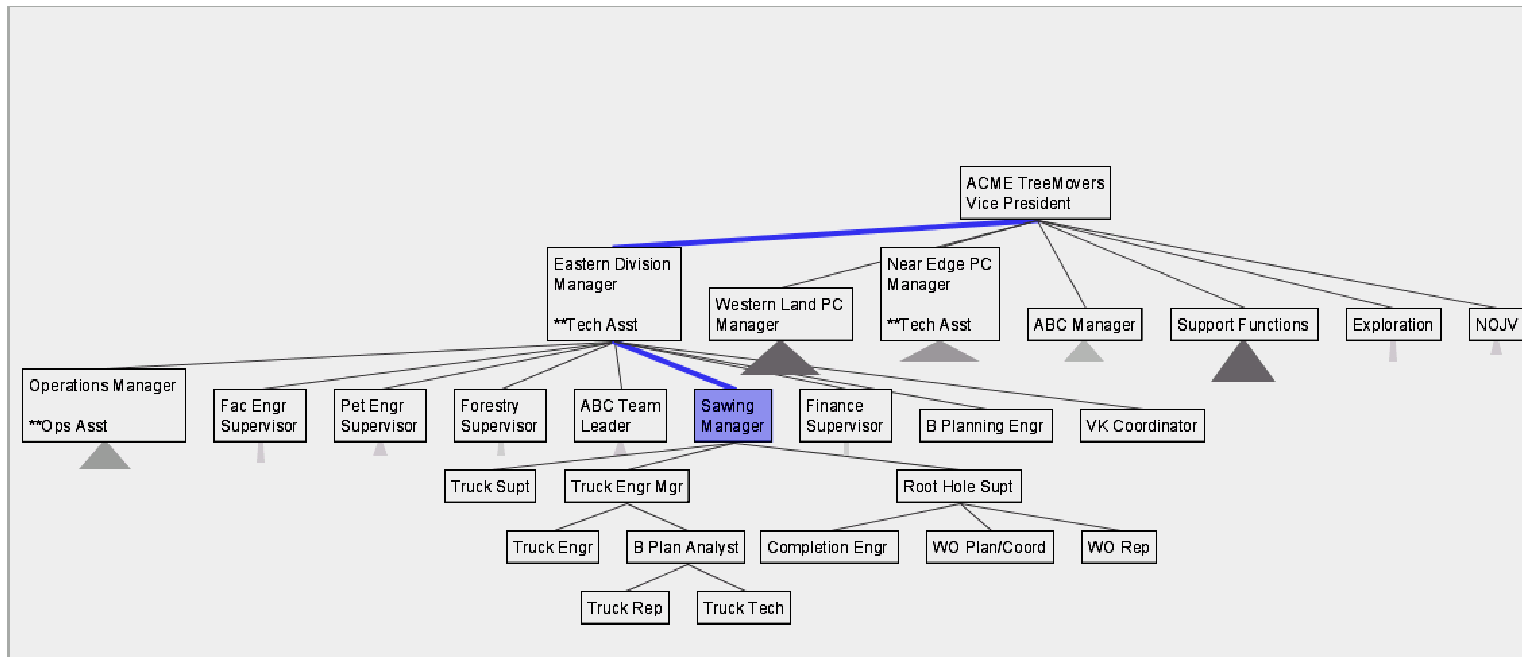


# sequoiaview

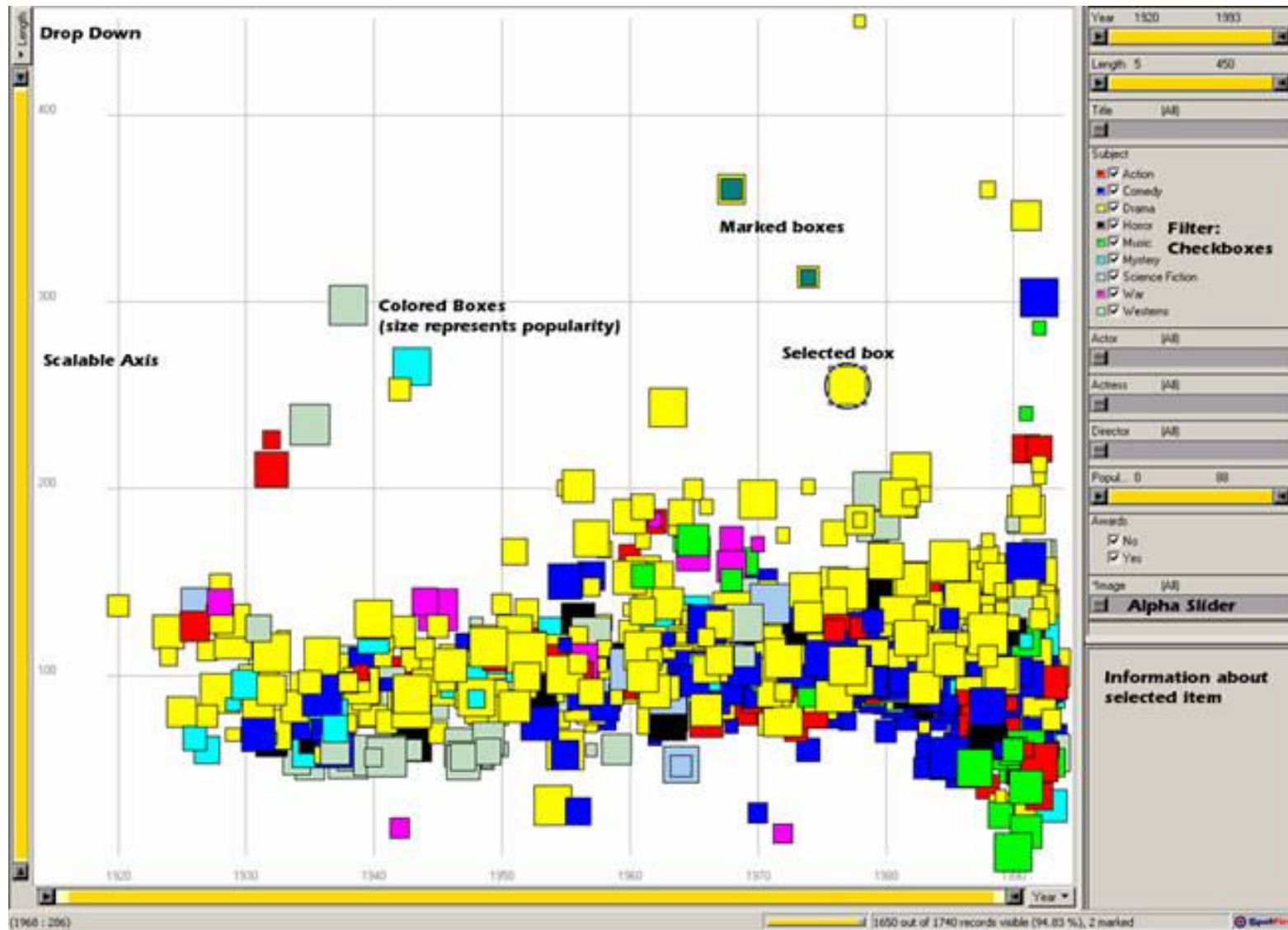




# spacetree

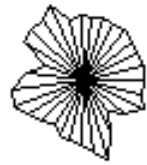


# spotfire

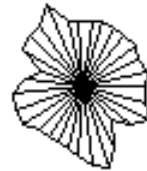


[http://www.cc.gatech.edu/classes/AY2003/cs7450\\_spring/Students/a1/sumier.phalake/](http://www.cc.gatech.edu/classes/AY2003/cs7450_spring/Students/a1/sumier.phalake/)

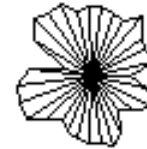
# star plot



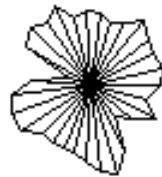
Connecticut



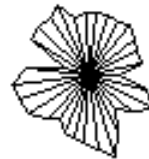
New Hampshire



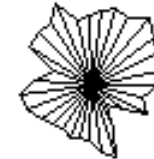
Pennsylvania



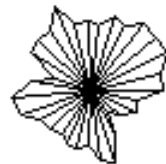
Maine



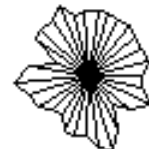
New Jersey



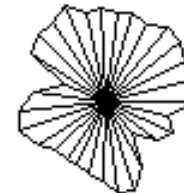
Rhode Island



Massachusetts



New York



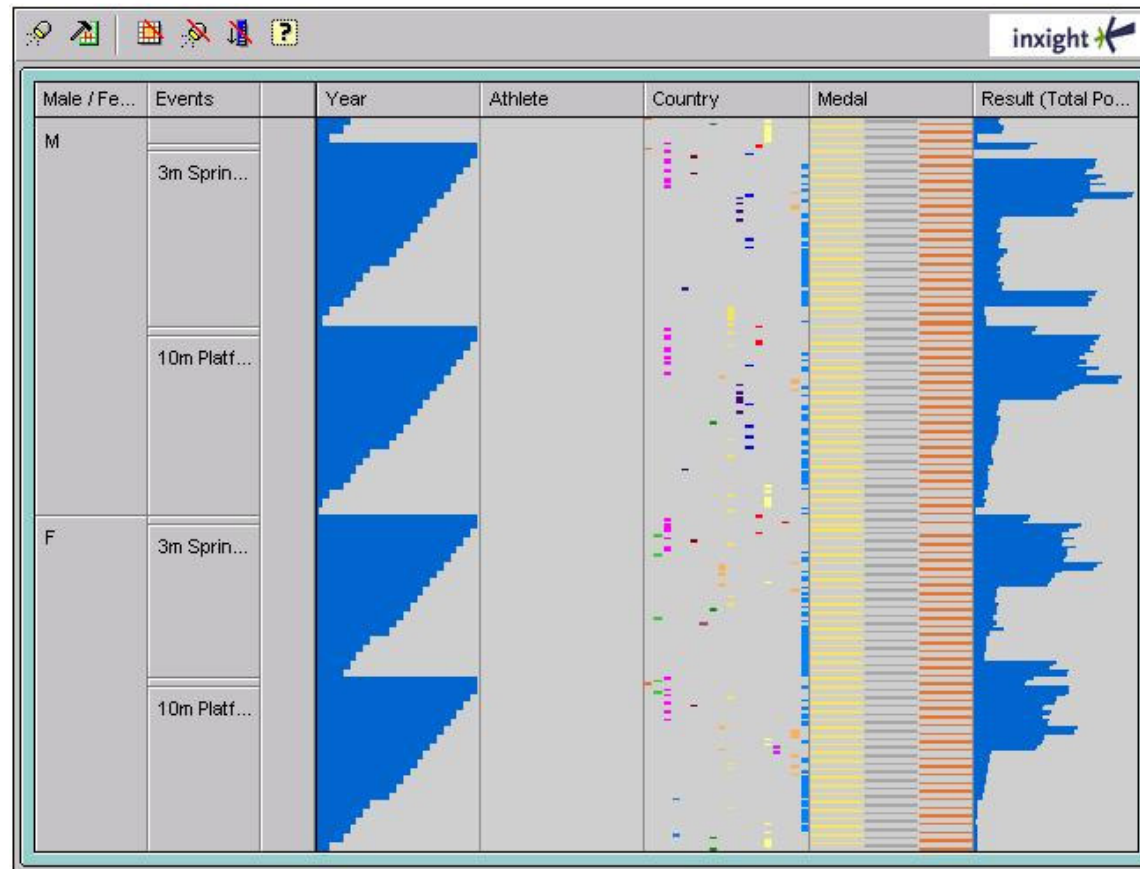
Vermont

Chambers, John, William Cleveland, Beat Kleiner, and Paul Tukey, (1983),  
*Graphical Methods for Data Analysis*, Wadsworth.

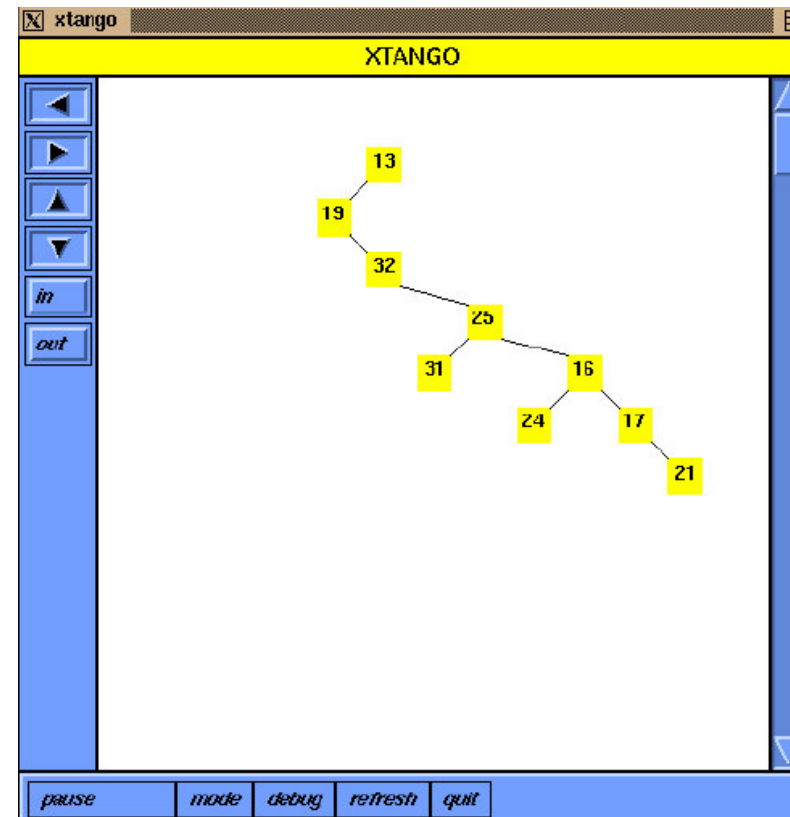
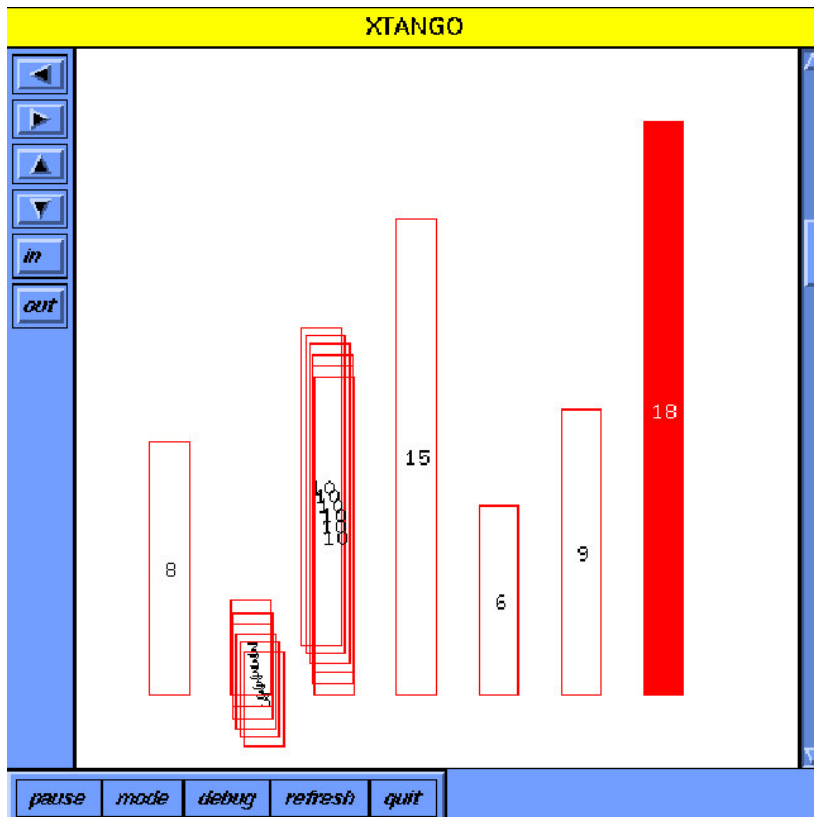


# table lens

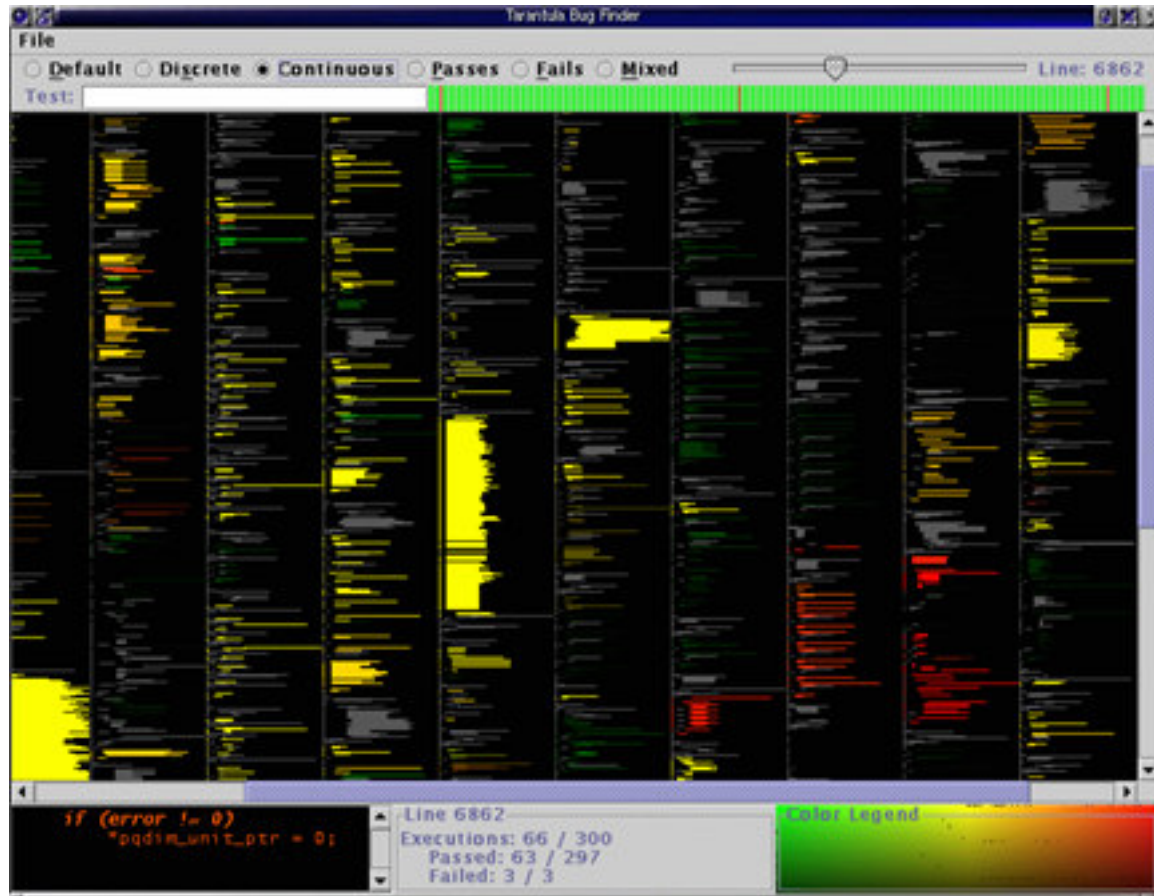
## Olympic Diving Medal Results



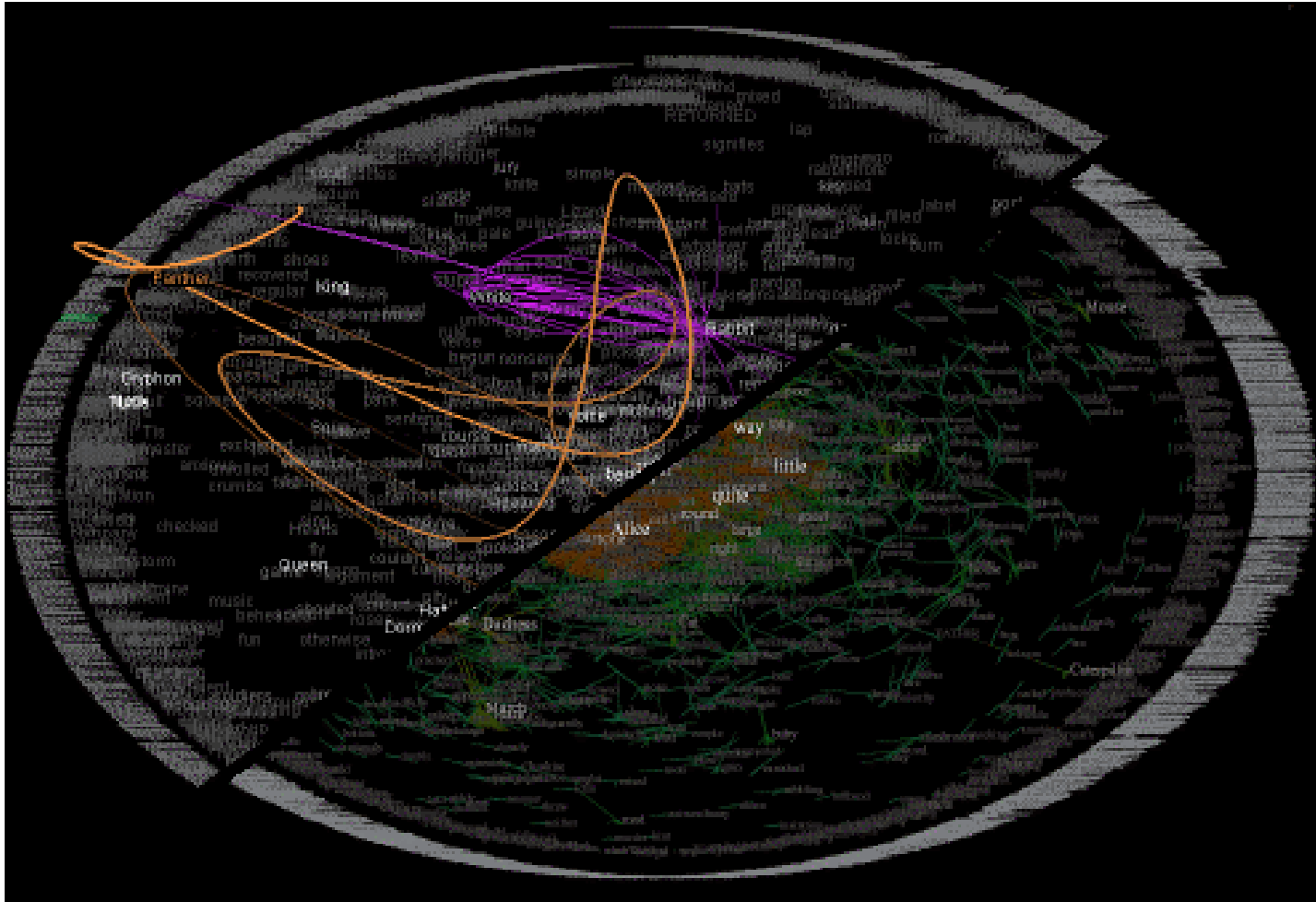
# tango



# tarantula

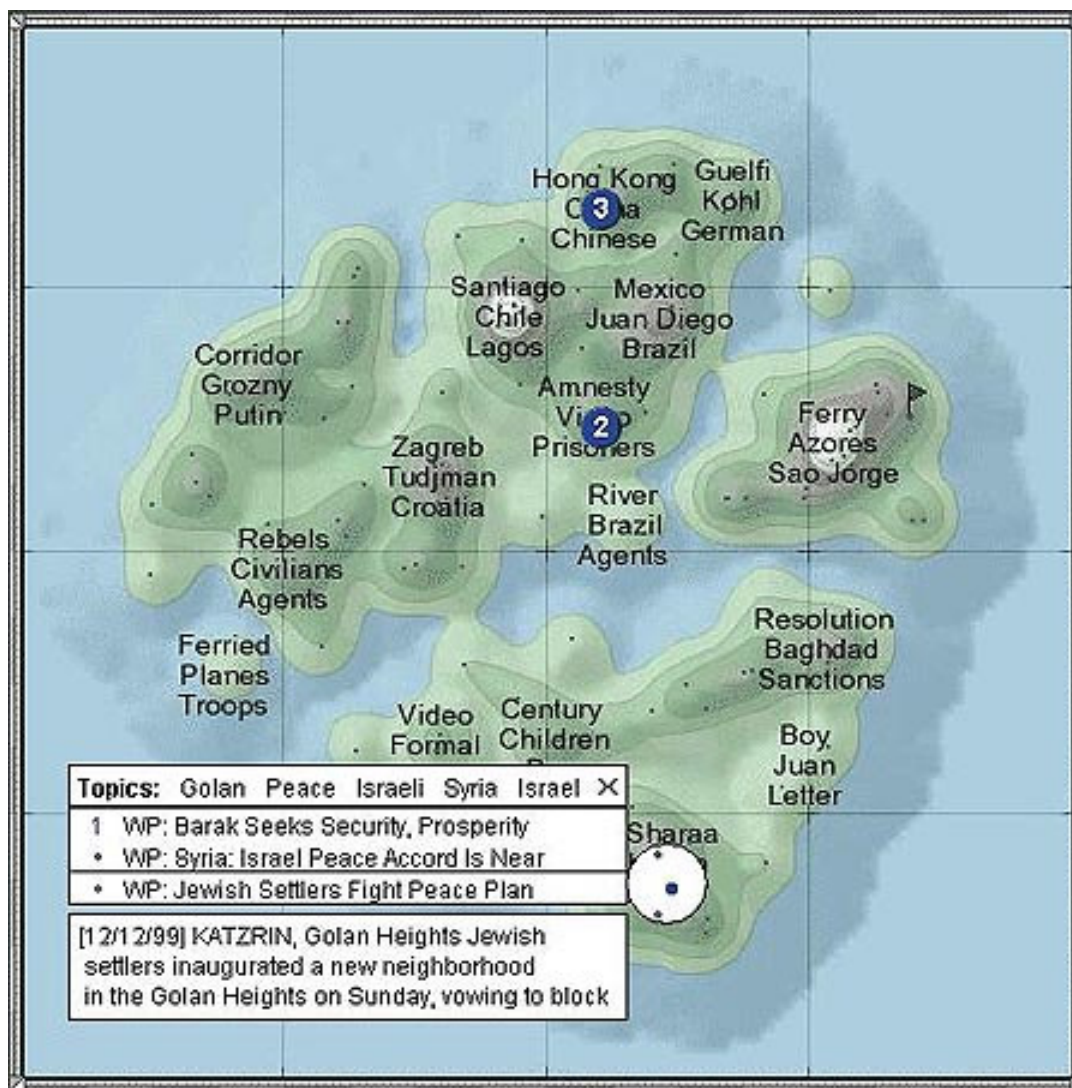


# textarc

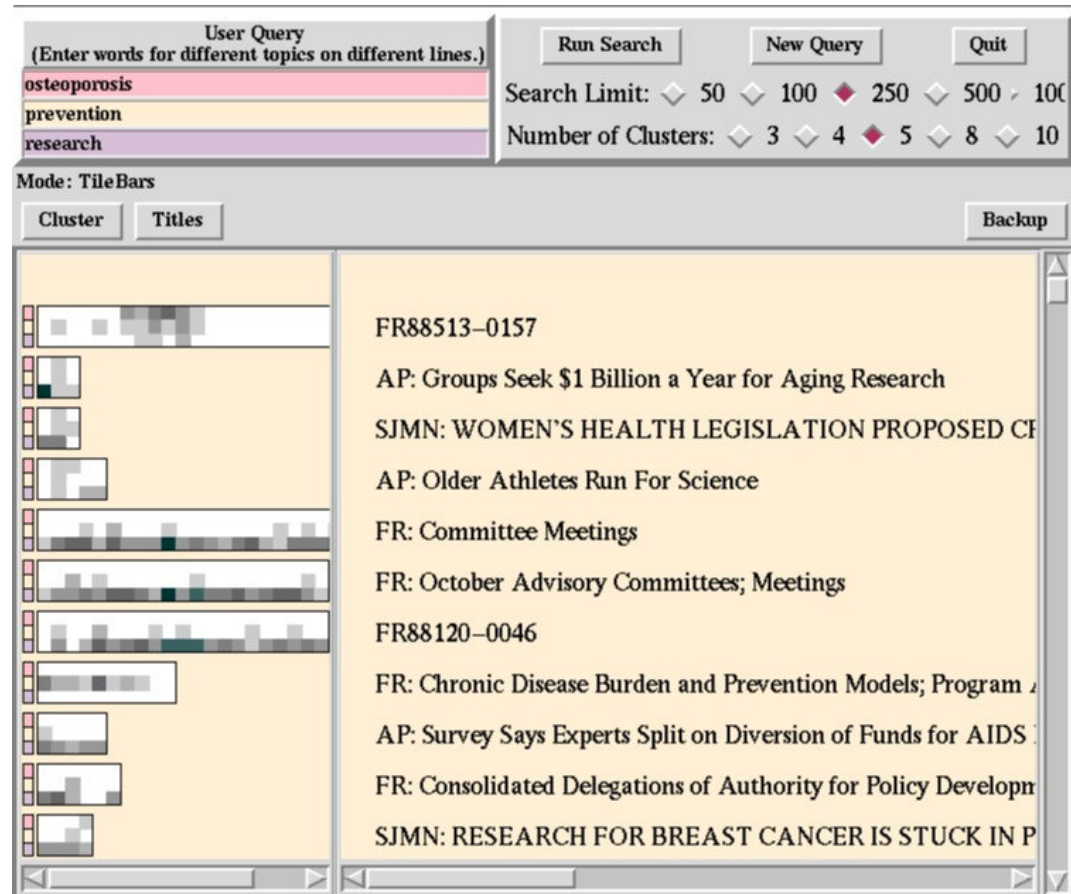




# themescape



# tilebar



Hearst, M., TileBars: Visualization of Term Distribution Information in Full Text Information Access, *ACM SIGCHI Conference on Human Factors in Computing Systems*, 1995, pp. 59--66.

<http://class.ee.iastate.edu/berleant/home/Courses/text/TextVisualization/survey.htm>

# timesearcher

**Toolbar**

**Query Space**

**Data Envelope**

**Details**

**Item List**

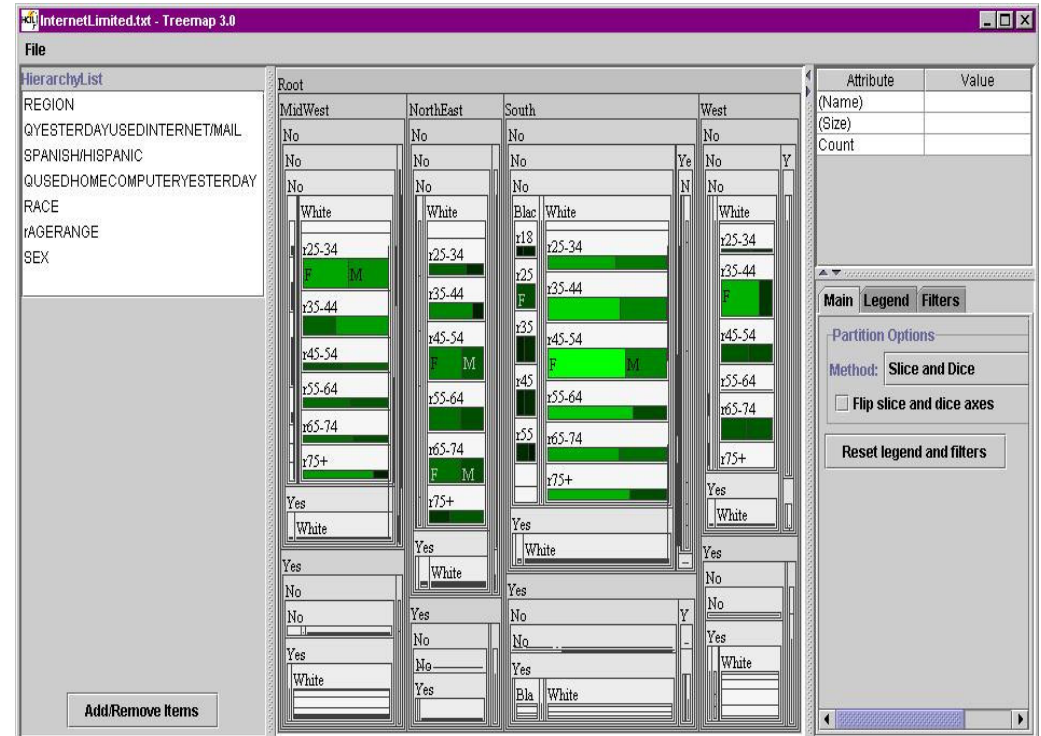
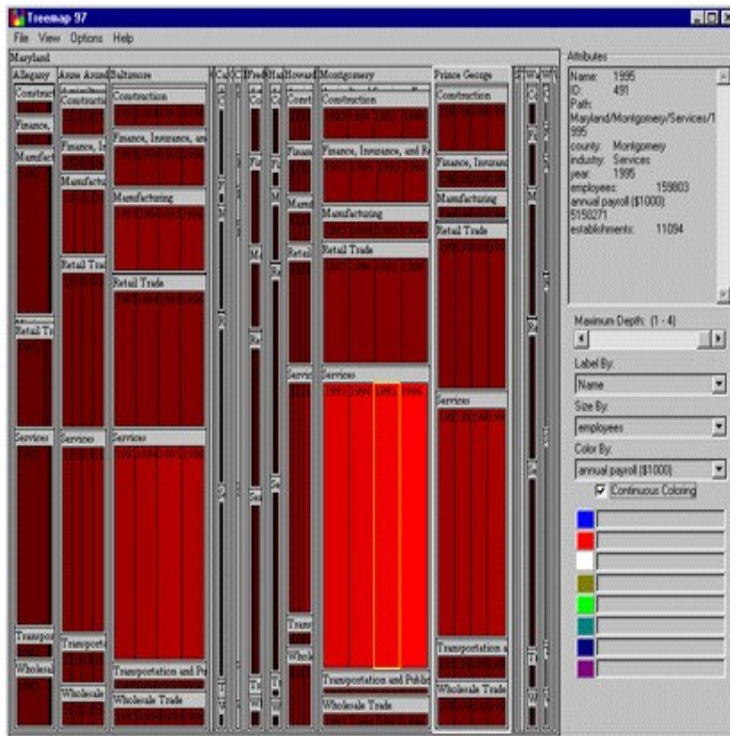
**Items in Data Set**

**Range Sliders**

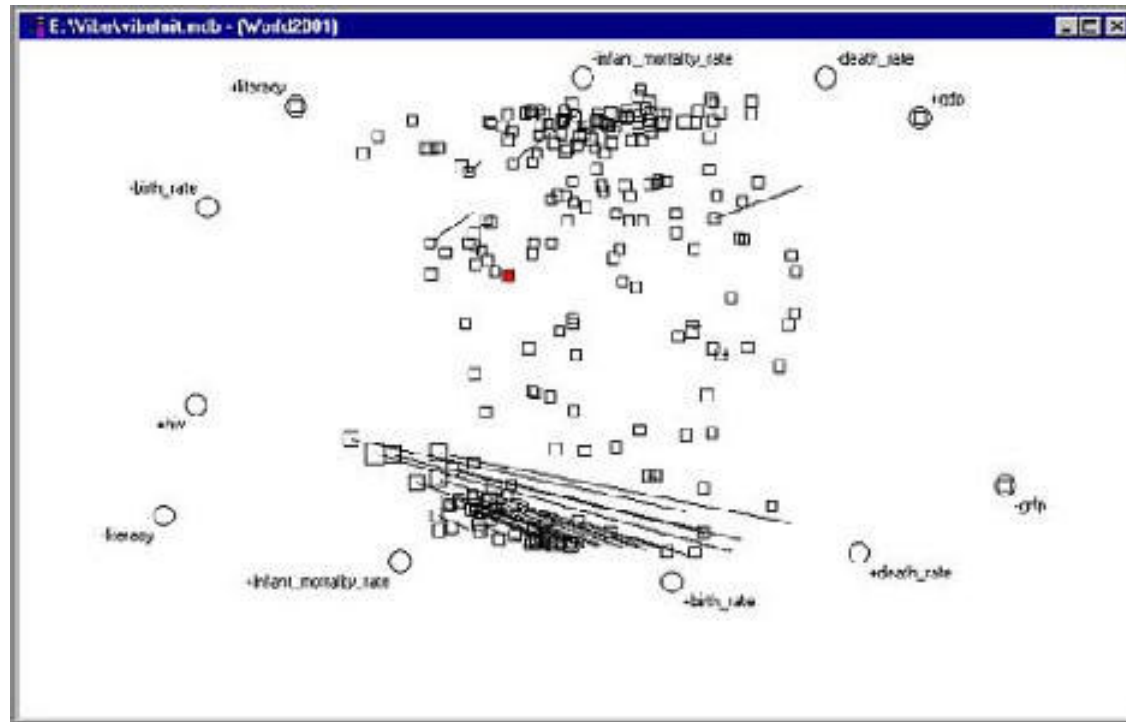
The screenshot shows the Timesearcher application window titled "TimeSearcher...13 Months of High and Low prices". The interface includes a menu bar (File, Edit, View, Transform, Help), a toolbar with icons for search, zoom, and other functions, and a search input field. The main display area is divided into several sections: a "Query Space" showing a shaded area representing the search range, a "Data Envelope" showing a line graph of price data, and a "Details" panel on the right showing a table of monthly high and low prices for "AIRBORNE FREIGHT CORP". Below the main display is an "Item List" showing a list of company names, and a "Range Sliders" section at the bottom right. Red arrows point to these components: "Toolbar" points to the top toolbar; "Query Space" points to the shaded area in the top graph; "Data Envelope" points to the line graph in the top graph; "Details" points to the table in the right panel; "Item List" points to the list of company names in the bottom right; "Items in Data Set" points to the list of company names in the bottom left; and "Range Sliders" points to the sliders in the bottom right.

Names	Low	High
September:	20.81	21.75
October:	21.38	22.44
November:	22.56	23.44
December:	21.5	22.13
January:	19.19	20.06
February:	17.88	18.56
March:	21.63	24.06
April:	20.75	21.88
May:	19.94	20.56
June:	18.75	19.75
July:	14.69	15.44
August:	14.75	15.13
September:	9.5	11.25

# treemap



# vibe



# webbook & web forager





# wing



Figure 1: The WING system.

# xmdv

